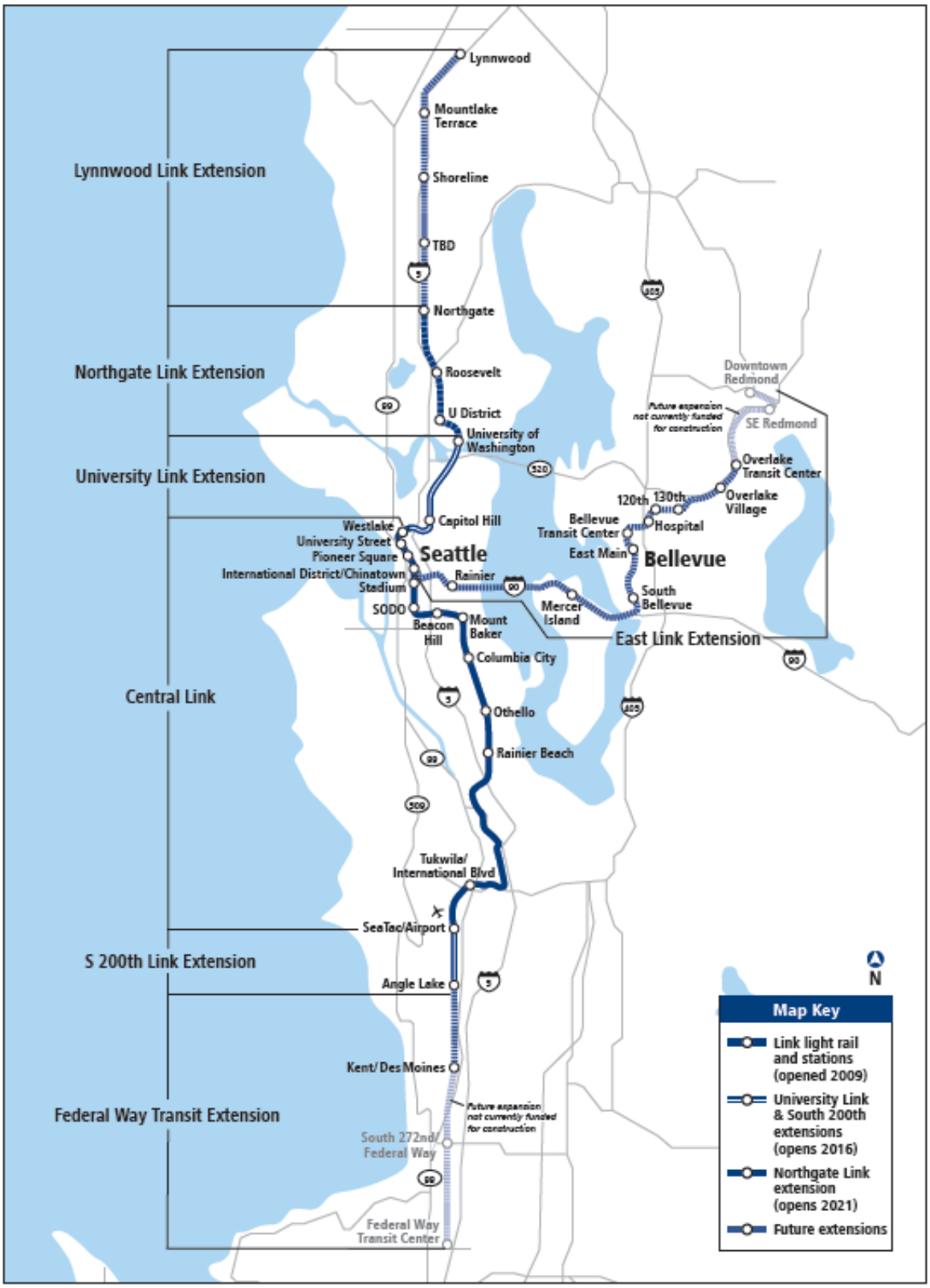
Progress Report
Link Light Rail Program

Plinth concrete placement in the ULink tunnel

June | 2013

SOUNDTRANSIT

Prepared by Project Control | Design, Engineering & Construction Management



Map of Sound Transit's current and future light rail projects.

Projects

University Link Extension: The University Link Extension work program with $1.76 billion capital budget was approved by the Board in July 2008. The 3.15-mile light rail segment is located entirely underground with tunnels traveling from Pine Street, under the I-5 freeway to an underground station at Capitol Hill, continuing north beneath SR 520 and the Lake Washington Ship Canal to an underground station on the University of Washington campus, near Husky Stadium.

Northgate Link Extension: The University of Washington Station (UWS) to Northgate project is a 4.3-mile extension of light rail from the UWS north under campus via twin-bored tunnels to an underground station at NE 45th Street continuing to an underground station at NE 65th Street and via tunnel, retained cut and elevated sections to Northgate. The project is in Final Design; NTP for Early Work at station locations was given in August 2012.

Lynnwood Link Extension: This project entails the planning, design and construction of an extension of Northgate Link from Northgate to Lynnwood in Snohomish County with additional service in the cities of Shoreline and Mountlake Terrace. The development of the draft environmental impact statement (DEIS) and conceptual engineering of the DEIS alternatives started in January 2012.

East Link Extension: East Link Extension expands light rail to East King County via I-90 from Downtown Seattle to the Overlake Transit Center area of Redmond, with stations serving Rainier Avenue/I-90, Mercer Island, South Bellevue, Downtown Bellevue, Overlake Hospital, the Bel-Red corridor, Overlake Village and the Overlake Transit Center. Revenue service to the Overlake Transit Center is forecast for early 2023 with a tunnel route in Downtown Bellevue.

Initial Segment: Completed 13.9-mile light rail line between downtown Seattle and South 154th Street in the City of Tukwila. Revenue service began on July 18, 2009.

Airport Link: Completed 1.7-mile extension of the Initial Segment to Sea-Tac International Airport. Revenue service began on December 19, 2009.

South 200th Link Extension: S. 200th Link Extension consists of a 1.6-mile extension of the light rail from the SeaTac/Airport Station to an elevated station at South 200th Street. Preliminary Engineering and the Environmental Impact Statement have been completed and a Record of Decision has been issued for this segment. The Project is being developed through a design/build (DB) delivery strategy. NTP was given to the DB contractor in October 2012.

Federal Way Transit Extension: Sound Transit has initiated studies to identify and evaluate routing and station location requirements to inform conceptual engineering and environmental review for the extension of light rail to the Federal Way Transit Center; with preliminary engineering to be completed on the segment extending from S. 200th St. to Kent/Des Moines in the vicinity of Highline Community College. Planning and preliminary engineering for this extension is scheduled to be completed by late 2015; the proposed budget for this effort is $41.8 million.

Tacoma Link Expansion: In partnership with the City of Tacoma and Pierce Transit, Sound Transit is studying the potential of expanding Tacoma Link in the context of the City and Pierce Transit service and capital plans.

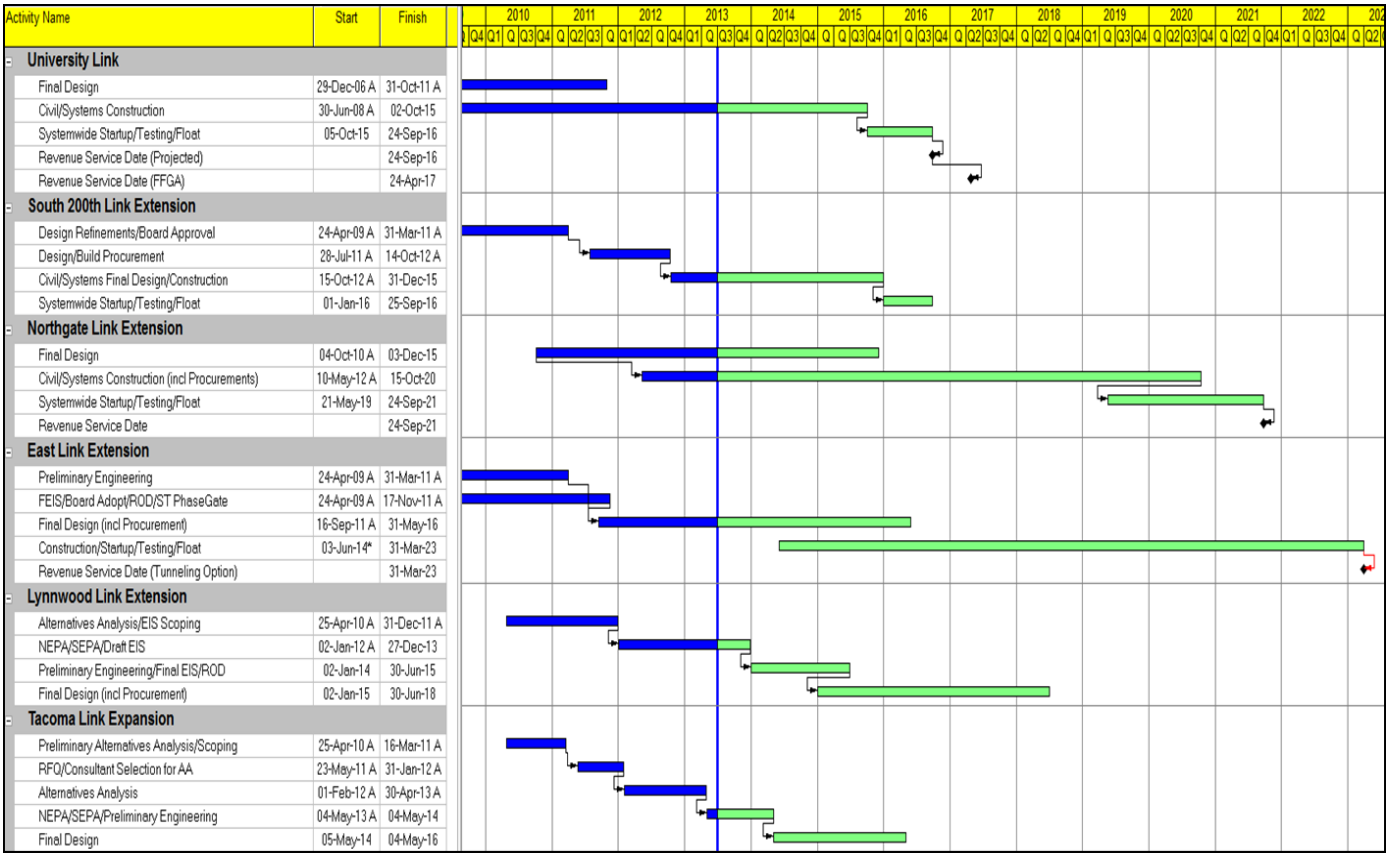
Link Operations and Maintenance Satellite Facility: Sound Transit is reviewing and evaluating current and future light rail storage and maintenance requirements to support the development, design, and construction of a future light rail operations and maintenance facility for proposed system expansion.

Active Program Budget

Project	Adopted Budget	Committed to Date	Incurred to Date
University Link[3]	$1,947.7	$1,565.7	$1,176.4
Northgate Link Extension[2]	$2,131.4	$282.1	$152.5
Lynnwood Link Extension[1]	$57.1	$22.0	$17.5
East Link[2]	$756.8	$235.3	$127.6
Initial Segment[4]	$2,433.7	$2,323.7	$2,296.3
Airport Link[4]	$263.1	$263.3	$261.2
S. 200th Link Extension[2]	$383.2	$251.9	$83.1
Federal Way Transit Extension[1,5]	$41.8	$3.9	$3.4
Tacoma Link Expansion [1,5]	$5.8	$1.5	$1.1
Link Operations & Maintenance Satellite Facility[1,5]	$9.4	$3.4	$3.4
Total	**$8,030.0**	**$4,944.4**	**$4,086.2**

Table figures in millions *(1) Preliminary Engineering Phase; (2) Final Design Phase ; (3) Construction Phase; (4) In Service -No more updates , (5) Updated Quarterly.*

Program Schedule



No changes this period.

Project Summary

Limits: 3.15-mile extension of the Initial Segment light rail transit (LRT) system from the Pine Street Stub Tunnel (PSST) in downtown Seattle to University of Washington (UW) campus near Husky Stadium.

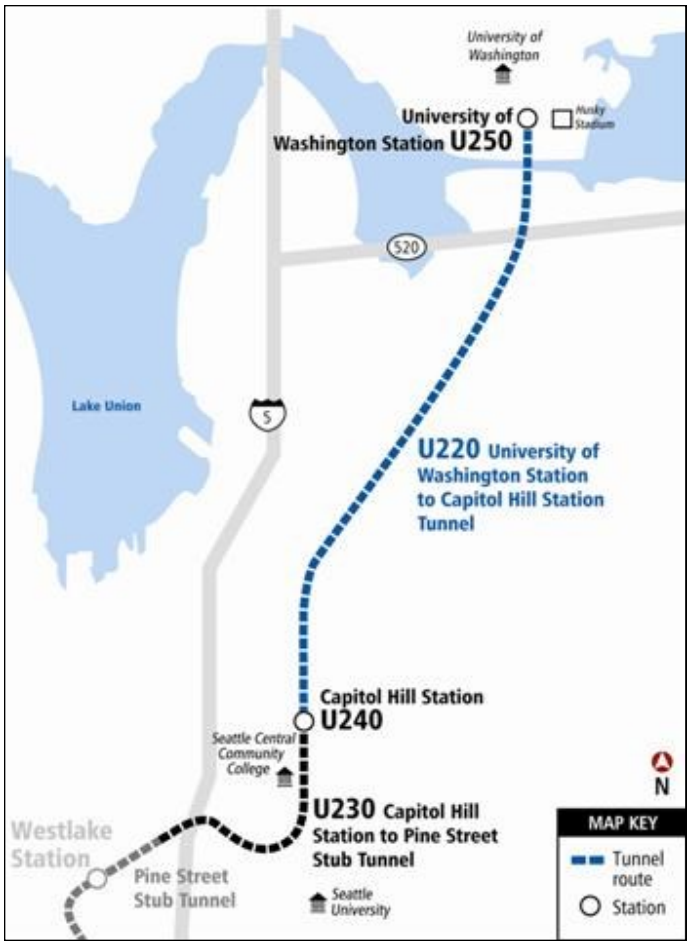
Tunnels: Two twin bored tunnels. Two contract segments: U220 starts at Husky Stadium, continues beneath SR 520 and the Lake Washington Ship Canal and south to the Capitol Hill underground station. U230 commences at Capitol Hill Station and proceeds south under the I-5 freeway to the PSST.

Stations: 2 underground center platform stations – Capitol Hill (U240) and University of Washington (U250). U240 is approximately 65' underground with three station entrances. U250 is about 100' below ground, with three station entrances and connections to the UW campus by a pedestrian bridge.

System: 27 LRV; direct fixation tracks, signals, traction electrification, and SCADA communications

Budget: $1.948 billion including finance cost (capital subtotal of $1.756 billion)

Schedule: Project completion in September 2016



Key Project Issues

- U830 Systems access will be a continuous issue as there are no tunnel portals in the U-Link project. All access coordination are crucial and will be carefully orchestrated between Civil and System contractors. Coordination will be closely monitored. Both station contractors and the system contractors are collaborating well at the moment.
- U830 Systems submittals are being monitored closely. Contractor is working closely with the sub-contractors in attaining proper equipment information.
- *U250 University of Washington Station*: UW's Husky Stadium renovation and the Montlake Triangle projects add logistic complexities in the geographical vicinity of the project. Coordination meetings between contractors now include U830 Systems.
- The Maintenance of Way Building was approved by the FTA to be incorporated to the U- Link project as part of the Operations and Maintenance Facilities site. This scope is to be executed through a design build project delivery method and is to be commissioned prior to the U-Link Pre-Revenue service date of February 2016. This tight window schedule will be closely monitored. The Architectural & Engineering consultant was hired to assist in completing a design build program. Advertisement for RFQ on the Design Builders planned for July.
- *University of Washington Central Campus Lab mitigation:* Originally in 2008, UW stated that relocating labs will not be required for U- Link until during Northgate Link; however, UW recently decided that relocation is necessary prior to start of Northgate Link tunnel construction. While this issue has no impact to ST's schedule or scope, it will have a financial impact.

Project Cost Summary

The U-Link project cost is summarized in two types of cost classifications. In the first table, cost is classified in accordance with Sound Transit's Work Breakdown Structure (WBS); and in the second table, cost is summarized in accordance to the FTA's Standard Cost Categories (SCC) format. (Both tables' figures in millions.)

WBS Phase Elements	Baseline Budget	Current Adopted Budget	Commitment to Date*	Incurred to Date	Est. Final Cost (EFC)	Adopted Budget vs. EFC
ADMINISTRATION	115.2	115.2	45.7	49.6	115.2	0.0
PRELIMINARY ENGINEERING	24.4	24.3	24.3	24.3	24.3	0.0
FINAL DESIGN	77.9	87.6	83.9	76.1	87.6	0.0
CONSTRUCTION SERVICES	68.5	95.8	75.3	56.5	95.7	0.1
3rd PARTY AGREEMENTS	18.6	18.6	11.4	10.5	18.6	0.0
CONSTRUCTION	1,180.0	1,158.2	908.6	649.5	1,075.7	82.5
VEHICLES	103.9	103.9	99.2	99.0	103.9	0.0
ROW	167.3	152.3	125.5	125.5	127.7	24.6
Capital Total	**1,756.0**	**1,756.0**	**1,374.0**	**1,091.0**	**1,648.7**	**107.3**
FINANCE COST	191.7	191.7	191.7	85.4	191.7	0.0
Project Total	**1,947.7**	**1,947.7**	**1,565.7**	**1,176.4**	**1,840.4**	**107.3**

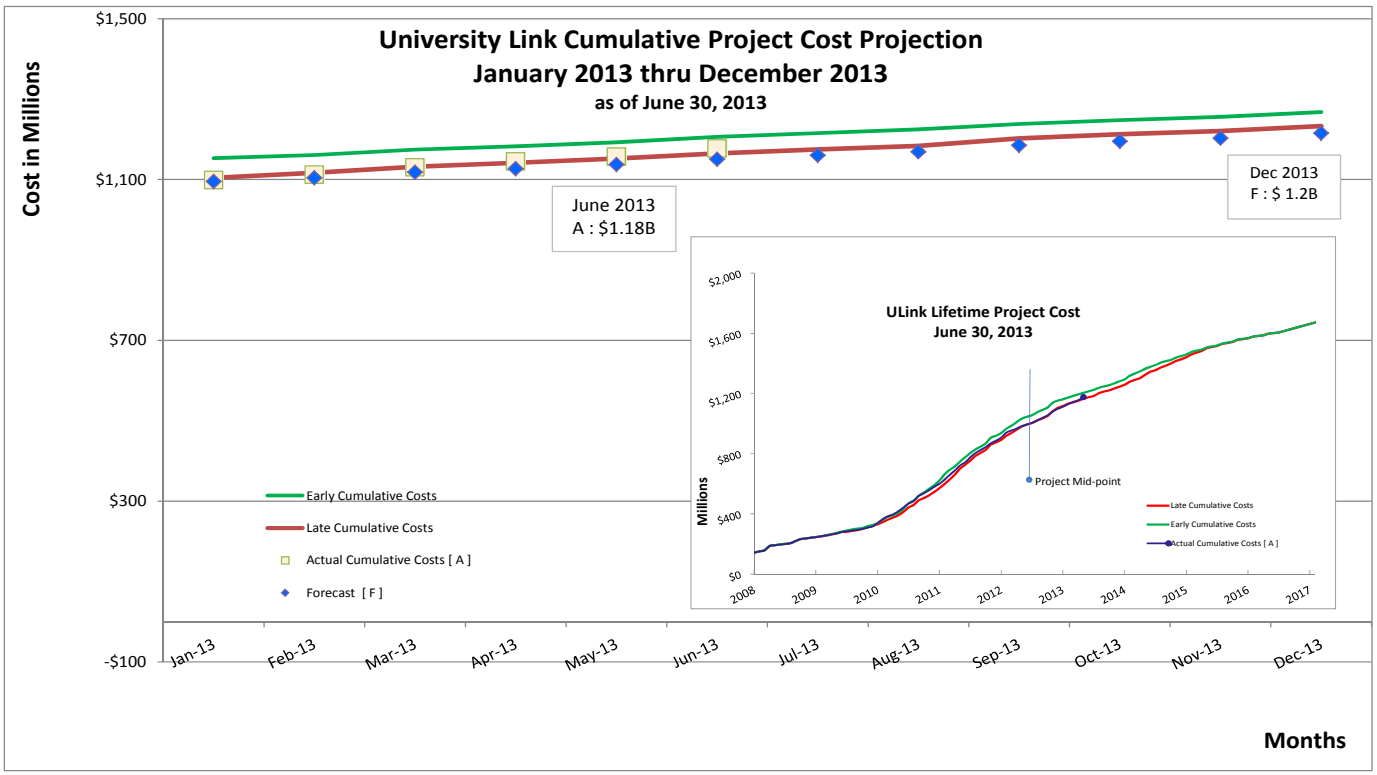
(*)Totals may not equal column sums due to rounding of line entries.

The June 2013 projected Estimated Final Cost (EFC) including Finance Cost continues to remain at $1.84B. This period, approximately $15.9M was incurred, increasing the project Incurred to Date amount to $1.09B (Finance Cost excluded). Direct construction cost accounted for over 65% of the cost incurred in June at $10.4M. The direct construction EFC continues to trend below $1.08B. This trend will be improving as both the tunnel scope are now concluding. The Capitol Hill Station (U240) contractor continues concrete placement and the Systems (U830) Contractor has completed rail welding and distribution. The total Incurred to Date for the Construction Phase is approximately $649.5M with a current commitments of approximately $908.6M. Cost for LRV is at $99M with a commitment of approximately $99.2M due to an adjustment in sales tax and a minor change as close-out commences.

Construction EFC under the SCC format for this period remains stable and relatively unchanged at about $1.02B. Construction phase expenditures in June is at $10.4M to which over 65% of this period's cost is attributed to station work. U-Link construction continues to transition from the tunneling scope to station construction with Systems scope ramping up. U220 and U230 work are largely associated with punch list and has essentially demobilized. U250 station continues to show good progress with the basic station structure on the north end now evidently visible from the street level.

Project Elements by SCC	Baseline Budget	Current Adopted Budget	Commitment to Date*	Incurred to Date	Estimated Final Cost (EFC)	Adopted Budget vs. EFC
10 Guideway & Track Elements	626.8	543.4	419.9	382.7	470.0	73.4
20 Stations	366.3	367.1	329.8	202.0	363.4	3.8
30 Support Facilities: Yards, Shops	7.0	7.1	8.0	7.1	23.1	-16.0
40 Sitework & Special Conditions	59.0	72.2	55.6	43.4	60.1	12.1
50 Systems	69.6	113.7	89.3	12.1	106.3	7.4
Construction Subtotal (SCC 10-50)	**1,128.8**	**1,103.5**	**902.5**	**647.2**	**1,022.9**	**80.6**
60 Row, Land, Existing Improvements	167.3	127.7	125.5	125.5	127.7	0.0
70 Vehicles	99.8	99.8	99.2	99.0	99.8	0.0
80 Professional Services	306.5	344.4	246.7	219.3	345.4	-1.0
90 Unallocated Contingency	53.5	80.6	0.0	0.0	53.0	27.6
Capital Cost Total (SCC 10-90)	**1,756.0**	**1,756.0**	**1,374.0**	**1,091.0**	**1,648.7**	**107.3**
100 Finance Cost	191.7	191.7	191.7	85.4	191.7	0.0
Project Total	**1,947.7**	**1,947.7**	**1,565.7**	**1,176.4**	**1,840.4**	**107.3**

(*)Totals may not equal column sums due to rounding of line entries.



Incurred to date for Construction under the SCC is almost $647M or roughly 58.6% of the budgeted construction scoped to date. Total capital cost incurred to date including non-construction cost (SCC 60 thru 90) is over $1.09B or about 62% of total project budget (excluding Finance Cost).

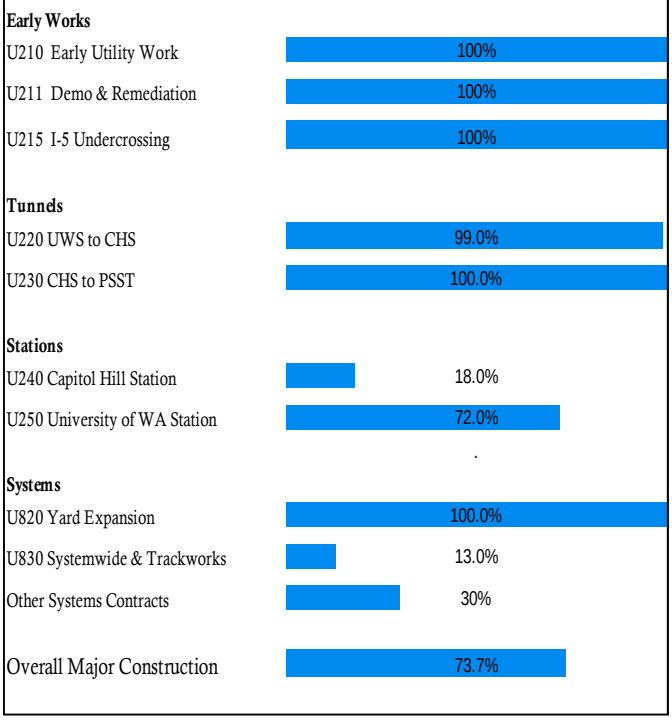
Maintenance of Way building (U810) is estimated at about $16M is now incorporated into SCC 40 Site work & Special Conditions. This cost was not originally part of the baseline estimate and will be covered by Unallocated Contingency. A decrease in SCC 10 Guideway & Track Elements (where the tunneling scope is concluding) will offset this cost.

Total cost incurred at the end of June 2013 including Finance Cost is over $1.17B. The Project financing cost incurred to date is $85.4M with a revised annual projection of $23M to incur in 2013. The next finance cost up date will be for the 3nd QTR 2013. Overall, University Link cost to date is projected to be approximately $1.2B by December 2013.

The EFC for project Finance Cost continues to be projected at $191.7 million. This cost represents booked financing cost and is generated based on allocation of appropriate level of financing cost to each capital project at Sound Transit. Despite an earlier than anticipated release of $44 million of the FFGA funds due to the American Recovery Reinvestment Act that was used to pay down finance charges, it is premature to project any savings at this time.

Overall Construction Progress Summary

6/30/2013



Note: The overall construction progress above is based on a weighted combination of duration, schedule and cost % complete for individual construction contracts as compared to the overall U-Link construction contracts.

Cost Contingency Management

Project contingencies continue to remain at healthy levels due to the favorable construction bidding climate, ROW acquisition cost trends, diligent project risk management practices and excellent tunneling conditions. June's overall contingency balance dropped slightly by $284K. Contingency level continues to be well above the Planned Contingency Drawdown; the projected planned balance between the end of 4th QTR 2012 and the end of 2st QTR 2013 ranges from $157M and $130M and the Contingency Buffer was projected to be in the range of $149M and $100M, respectively. The projected planned Reserved Contingency balance will be reduced from $80M to $50M at the end of the 2nd QTR 2012 (see contingency curve at the bottom of page) in anticipation of the completion of tunneling and the next projected plan reduction is from $80M to $50M at the start of 2nd QTR 2013. Barring any catastrophic event, there is a very high likelihood that the contingency trend will remain intact and will improve as the tunneling scope is closed out.

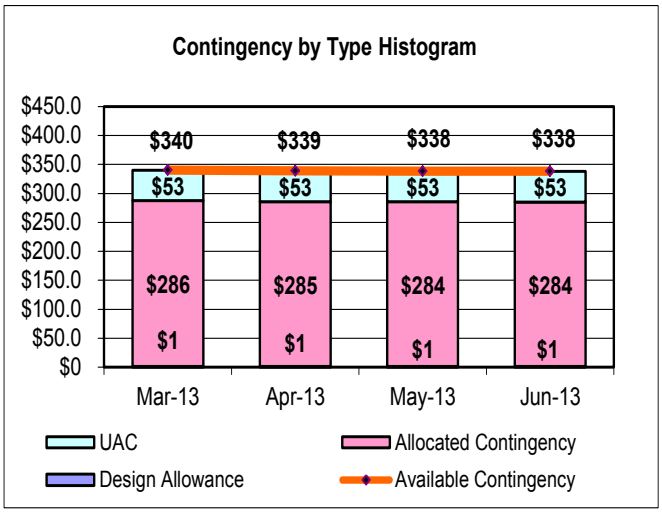
Design Allowance: The balance of design allowance has been reduced to $1.1M and is consistent with the project cycle as all the major design has been completed. The level of design allowance currently represents less than one-half percent of the total remaining scope in the project that has not been procured.

Allocated Contingency: . Allocated Contingency continues to remain stable at $284M.

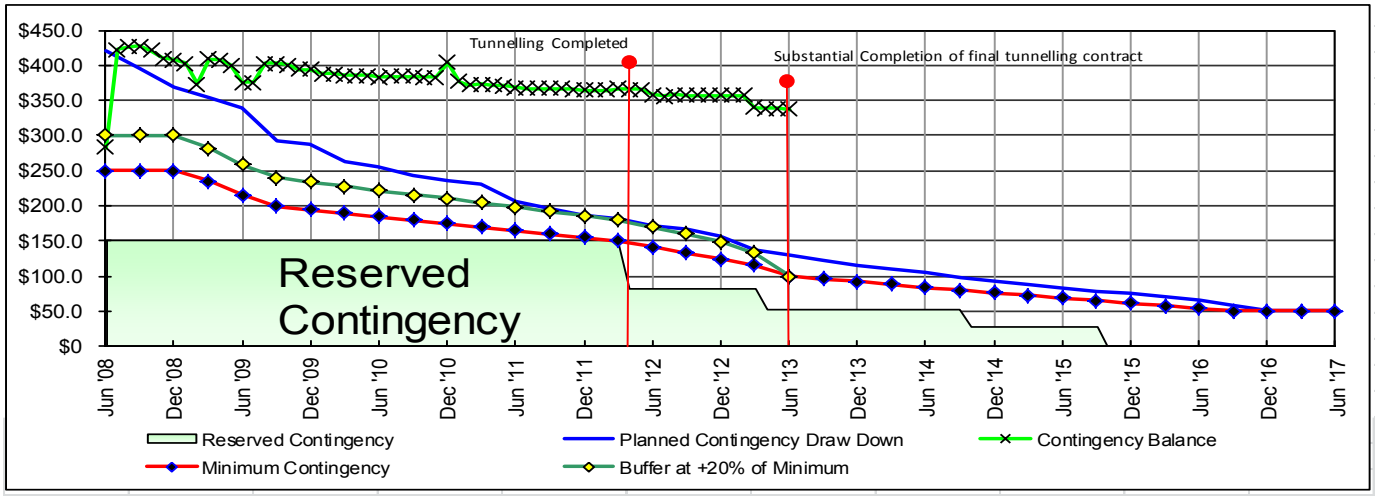
Unallocated Contingency (UAC): The total UAC balance remains at $53M due and continues to remain stable compared to the Baseline Cost Estimate amount of $53.7M.

Contingency Status	BCE		Current Status	
	Amount	% of Total	Remaining Amount	% Remaining Work
Design Allowance	$103.9	7.8%	$1.1	0.3%
Allocated Contingency	$264.3	19.8%	$284.0	86.9%
Unallocated Contingency	$53.7	4.0%	$53.0	16.2%
Total:	**$421.9**	**31.6%**	**$338.1**	**103.5%**

Percentage = Contingency $ /(EFC or Remain. Work $ ex-Contingencies)



MINIMUM CONTINGENCY CURVES as of June 30, 2013 — $ in millions



Risk Management

The University Link Risk Management Plan (RMP) established a risk management and oversight process for assessing and monitoring risks to determine how risks have been reduced or mitigated. On a quarterly basis, U Link reviews and updates risks to reflect condition at the end of the current quarter. The RMP is also executed in compliance to the Federal Transit Administration's (FTA) guidance laid out as part of FTA's Program Guidelines sub-task 40E.

Project Risk Overview:

At the end of 2nd QTR 2013, U-Link project represents approximately 70% construction completion with U220 Tunnel achieved Substantial Completion; U230 Tunnel with punch list remaining; U240 Station Contractor; Completed U250 Basic Structure on the north end; Commenced Rail Distribution and Initiated Tunnel Construction activities in the U830 Systems scope. As part of this review, ST worked with the FTA's PMOC to identify risks on the register that were both within the current management time horizon and posed considerable risk to project objectives by having both relatively high probability and impact. Prior to this update, the register contained a total of 523 risks, of which 122 were active (401 closed). This quarterly update resulted in a total of 547 risks, of which 128 are active (418 closed). Closed risks were those that had passed their time for potential impact, e.g., risks associated with surface and tunnel excavation at the stations and design risks that have been resolved since the last update. The rise in active risk this quarter is due to the incorporation of U810 MOW Design Build program to our Risk Mitigation Plan.

The top remaining risk subjects that will require at least partial mitigating action in the upcoming quarter are provided below along with their planned risk management strategies:

- **Civil to Civil Contract Interfaces**
  Risk subjects pertaining the transitioning interfaces between Tunneling contractors (U220 and U230) to Station Finishes contractors (U240 and U250)

- **Civil to Systems Contract Interfaces**
  Risk subjects pertaining to the transitioning interface between Tunneling contractors (U220 and U230) and Station Finishes contractors (U240 and U250) to Systems contractor (U830)

- **Systems Long Lead Items**
  Long lead specialty materials that are necessary to complete for timely installation of track and signaling scope

- **Systems Software Development**
  Development of the software systems to operate U-Link and the integration of the current operating system.

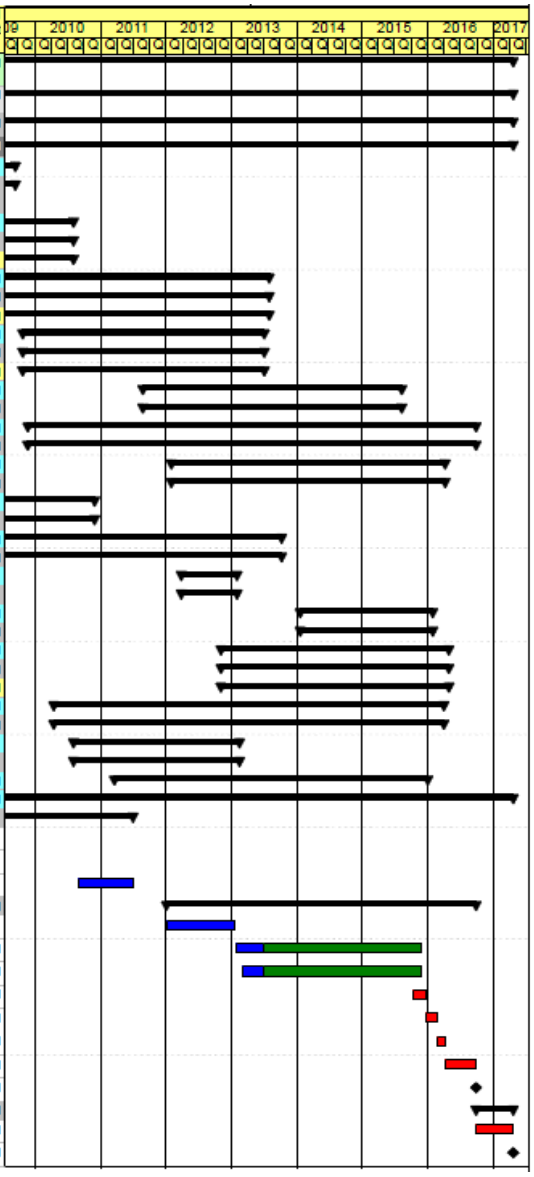
- **Systems Final Design, Installation, Testing and Rail Activation (U830, U835, System-wide Testing/ Rail Activation)**
  All phases U-Link systems integration between the cut over of the current operating systems through to the commissioning and occupancy of the U Link program

- **University of Washington Lab Relocation Mitigation**
  Originally in 2008, UW stated that lab relocation will not be required for University Link but has now decided that relocation is necessary prior to start of Northgate Link Extension tunnel construction.

Project Schedule Summary

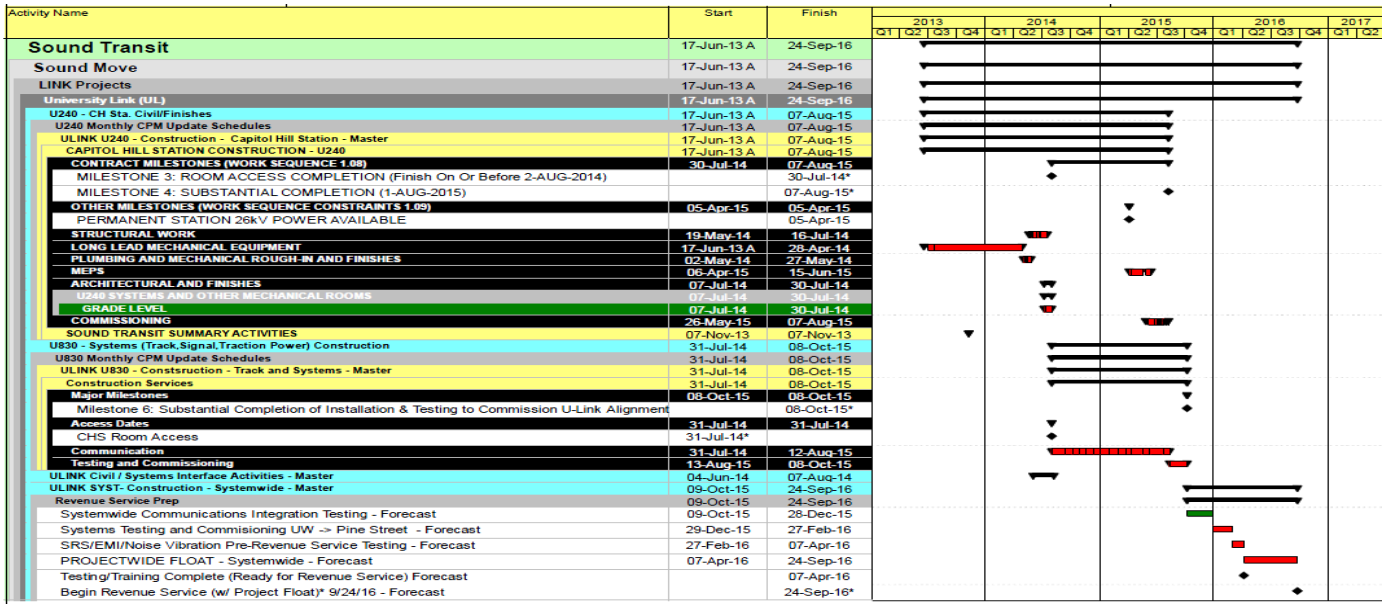
The University Link schedule is provided below. U210, U211 and U215 early work contracts have been completed. The U820 LRV Storage Yard Expansion Contractor has also completed all work. The U220 Northbound (NB) TBM completed mining on April 2012 and the Southbound (SB) TBM arrived at the Capitol Hill Station in March 2012. U220 cross passage (CP) mining is 100% complete; Substantial completion was achieved this period and closeout activities are well underway. The U230 achieved Substantial Completion in March 2013, completed all punchlist items this period and continued working on final documentation. In U250, platform topping slab pours at grid 2 and 3 was completed and grid 1 to 2 is expected next period to prepare for the South end for the charging of rail by U830. The Montlake Triangle Project pedestrian bridge falsework over Montlake has been removed elevator structural work is underway. U240 CHS Station Finishes Contractor is well underway with concrete work at the Northend, Southend and Central Area. Working three fronts in the station box. The Contractor has commenced pours on the basement level in the central area of the station with the Peri Form system. U830 has completed rail charging at CHS and plinth and rail installation between CHS and PSST is well underway. 26kv cable installation is complete between CHS and PSST. Coordination between the U830 Systems Contractor and the station contractors continues. Procurement has commence for U835 EMI/ Vibration in the 2nd QTR 2013. U860 Fiber Retrofit; upgrades and fiber installation is now complete. The targeted revenue service milestone remains September 24, 2016.

Activity Name	Start	Finish	Total Float
Sound Transit	14-Jun-04 A	24-Apr-17	190d
Sound Move	14-Jun-04 A	24-Apr-17	190d
LINK Projects	14-Jun-04 A	24-Apr-17	190d
University Link (UL)	14-Jun-04 A	24-Apr-17	190d
U210/U211 - Utility Relocation/Demo & Envir. Rem.	20-Oct-08 A	14-Sep-09 A	
ULINK U210 - Construction - Adv. Utility Reloc. - UW - Master	20-Oct-08 A	14-Sep-09 A	
ULINK U211 - Construction - Demo/Env. Remed - CHS - Master	17-Nov-08 A	18-May-09 A	
U215 - I-5 Crossing Early Work	12-Feb-09 A	03-Aug-10 A	
U215 Monthly CPM Update Schedules	12-Feb-09 A	03-Aug-10 A	
ULINK U215 - Construction - I-5 Undercrossing - Master	12-Feb-09 A	03-Aug-10 A	
U220 - UW Sta. Excavation & Tunneling	25-Mar-09 A	02-Aug-13	0d
U220 Monthly CPM Update Schedules	25-Mar-09 A	02-Aug-13	0d
ULINK U220 - Construction - TBM Tunnels - UWS to CHS - Master	25-Mar-09 A	02-Aug-13	0d
U230 - CH Sta. Excavation & Tunneling	22-Oct-09 A	02-Jul-13	0d
U230 Monthly CPM Update Schedules	22-Oct-09 A	02-Jul-13	0d
ULINK U230 - Construction - TBM Tunnels - CHS to PSST - Master	22-Oct-09 A	02-Jul-13	0d
U240 - CH Sta. Civil/Finishes	24-Aug-11 A	07-Aug-15	0d
U240 Monthly CPM Update Schedules	24-Aug-11 A	07-Aug-15	0d
U250 - UW Sta. Civil/Finishes	19-Nov-09 A	23-Sep-16	0d
ULINK U250 - Construction - UW Station	19-Nov-09 A	23-Sep-16	0d
U810 - Maintenance of Way Bldg	01-Feb-12 A	05-Apr-16	0d
ULINK U810 - Maintenance of Way Bldg	01-Feb-12 A	05-Apr-16	0d
U820 - LRV Yard Expansion	29-May-09 A	30-Nov-10 A	
U820 Monthly CPM Update Schedules	29-May-09 A	30-Nov-10 A	
U821 - Light Rail Vehicles	01-Oct-08 A	09-Oct-13	0d
ULINK U821 - Construction - Light Rail Vehicles - Master	01-Oct-08 A	09-Oct-13	0d
U826 - Motorola Radio Console	27-Mar-12 A	31-Jan-13 A	
U826 - Motorola Radio Console	27-Mar-12 A	31-Jan-13 A	
U829 - Fare Collection	22-Jan-14	27-Jan-16	730d
ULINK U829 - Prelim Const. - Fare Collection (TVM and ORCA) - Master	22-Jan-14	27-Jan-16	730d
U830 - Systems (Track,Signal,Traction Power) Construction	01-Nov-12 A	29-Apr-16	0d
U830 Monthly CPM Update Schedules	01-Nov-12 A	29-Apr-16	0d
ULINK U830 - Constsruction - Track and Systems - Master	01-Nov-12 A	29-Apr-16	0d
U835 - EMI/Vibration/Wheel Flat Detection	13-Apr-10 A	28-Mar-16	0d
ULINK U835 - Prelim Const. - EMI/Vibration/Flat Wheel - Master	13-Apr-10 A	28-Mar-16	0d
U860 - Network System	02-Aug-10 A	13-Feb-13 A	
ULINK U860 - Prelim Const. - Systems Network - Master	02-Aug-10 A	13-Feb-13 A	
ULINK Civil / Systems Interface Activities - Master	23-Mar-11 A	29-Dec-15	0d
ULINK SYST- Construction - Systemwide - Master	14-Jun-04 A	24-Apr-17	0d
Preliminary Activities	14-Jun-04 A	30-Jun-11 A	
ULINK Final SEIS/ROD	14-Jun-04 A	07-Jun-06 A	
FFGA Approval/Award	15-Jan-09 A		
ULINK Final Design Engineering	31-Aug-10 A	30-Jun-11 A	
Revenue Service Prep	03-Jan-12 A	24-Sep-16	212d
Braided/Tactile Pavers Procurement & Delivery	03-Jan-12 A	15-Jan-13 A	
TVM Procurement & Installation	01-Feb-13 A	30-Nov-15	129d
Signage Procurement & Installation	28-Feb-13 A	25-Nov-15	94d
Systemwide Communications Integration Testing - Projected	13-Oct-15	24-Dec-15	0d
System Testing and Commissioning - Projected	28-Dec-15	25-Feb-16	0d
Pre - Revenue Testing - Projected	26-Feb-16	05-Apr-16	0d
PROJECTWIDE FLOAT - Systemwide - Projected	06-Apr-16	24-Sep-16	0d
Revenue Service Start (w/Float) (9/24/2016) - Projected		24-Sep-16*	0d
FFGA Dates	25-Sep-16	24-Apr-17	0d
FFGA Revenue Operation Float - Projected	25-Sep-16	24-Apr-17	0d
FFGA Revenue Operation Date Milestone - Projected		24-Apr-17*	0d



Progress and Critical Path Analysis

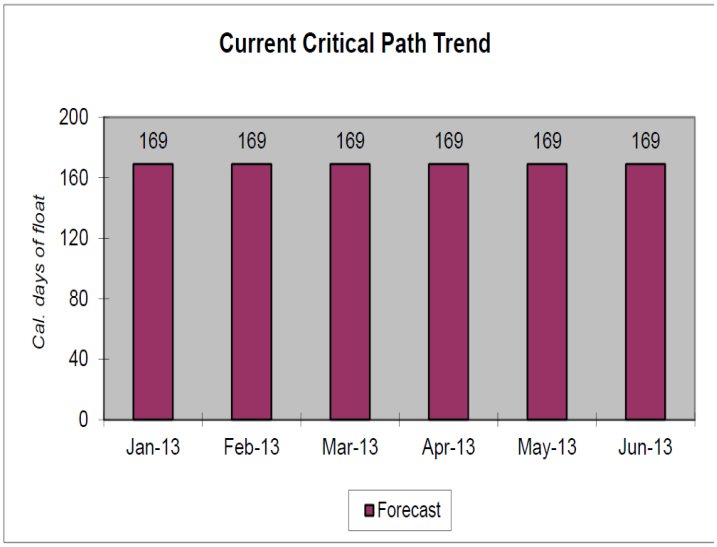
The U-Link master schedule update contains the tunnel contractors' schedules and interfaces with the stations and U830 (Track, Signal, Traction power and Communications System) schedules. Tunneling commenced in the 2nd QTR 2011 with the TBM assembly and launch. TBM mining was completed as of May 2012 and cross passage work is complete. U230 has achieved Substantial Completion and U830 has commenced rail charging in the south end of Capitol Hill Station (CHS) this period. U240 has completed 7 pours in the central area. The U240 and U830 contractor schedules have now been incorporated into the Master Schedule. Two critical paths are being tracked through the project and are identified below. Critical path #1 runs through U830 Communication design and material submittals, installation and testing. The critical path #2 is progressing through U240 CHS system room access and the handover of these rooms to U830 for equipment installation and testing and commissioning. It is expected that the system room access milestone may be less of a factor with the Coordinated Installation Program that is underway at both U-Link Stations. The baseline CPM schedule has been accepted for U240 and U830 and the U-Link critical path is now based on the Contractor's submittal. U830 system-wide communication integration testing will commence in the 3rd QTR 2015.



Activity Name	Start	Finish
Sound Transit	17-Jun-13 A	24-Sep-16
Sound Move	17-Jun-13 A	24-Sep-16
LINK Projects	17-Jun-13 A	24-Sep-16
University Link (UL)	17-Jun-13 A	24-Sep-16
U240 - CH Sta. Civil/Finishes	17-Jun-13 A	07-Aug-15
U240 Monthly CPM Update Schedules	17-Jun-13 A	07-Aug-15
ULINK U240 - Construction - Capitol Hill Station - Master	17-Jun-13 A	07-Aug-15
CAPITOL HILL STATION CONSTRUCTION - U240	17-Jun-13 A	07-Aug-15
CONTRACT MILESTONES (WORK SEQUENCE 1.08)	30-Jul-14	07-Aug-15
MILESTONE 3: ROOM ACCESS COMPLETION (Finish On Or Before 2-AUG-2014)		30-Jul-14*
MILESTONE 4: SUBSTANTIAL COMPLETION (1-AUG-2015)		07-Aug-15*
OTHER MILESTONES (WORK SEQUENCE CONSTRAINTS 1.09)	05-Apr-15	05-Apr-15
PERMANENT STATION 26kV POWER AVAILABLE		05-Apr-15
STRUCTURAL WORK	19-May-14	16-Jul-14
LONG LEAD MECHANICAL EQUIPMENT	17-Jun-13 A	28-Apr-14
PLUMBING AND MECHANICAL ROUGH-IN AND FINISHES	02-May-14	27-May-14
MEPS	06-Apr-15	15-Jun-15
ARCHITECTURAL AND FINISHES	07-Jul-14	30-Jul-14
TUNNEL DOORS AND OTHER MECHANICAL ROOMS	07-Jul-14	30-Jul-14
GRADE LEVEL	07-Jul-14	30-Jul-14
COMMISSIONING	26-May-15	07-Aug-15
SOUND TRANSIT SUMMARY ACTIVITIES	07-Nov-13	07-Nov-13
U830 - Systems (Track,Signal,Traction Power) Construction	31-Jul-14	08-Oct-15
U830 Monthly CPM Update Schedules	31-Jul-14	08-Oct-15
ULINK U830 - Constsruction - Track and Systems - Master	31-Jul-14	08-Oct-15
Construction Services	31-Jul-14	08-Oct-15
Major Milestones	08-Oct-15	08-Oct-15
Milestone 6: Substantial Completion of Installation & Testing to Commission U-Link Alignment		08-Oct-15*
Access Dates	31-Jul-14	31-Jul-14
CHS Room Access	31-Jul-14*	
Commuication	31-Jul-14	12-Aug-15
Testing and Commissioning	13-Aug-15	08-Oct-15
ULINK Civil / Systems Interface Activities - Master	04-Jun-14	07-Aug-14
ULINK SYST- Construction - Systemwide - Master	09-Oct-15	24-Sep-16
Revenue Service Prep	09-Oct-15	24-Sep-16
Systemwide Communications Integration Testing - Forecast	09-Oct-15	28-Dec-15
Systems Testing and Commisioning UW -> Pine Street - Forecast	29-Dec-15	27-Feb-16
SRS/EMI/Noise Vibration Pre-Revenue Service Testing - Forecast	27-Feb-16	07-Apr-16
PROJECTWIDE FLOAT - Systemwide - Forecast	07-Apr-16	24-Sep-16
Testing/Training Complete (Ready for Revenue Service) Forecast		07-Apr-16
Begin Revenue Service (w/ Project Float)* 9/24/16 - Forecast		24-Sep-16*

The critical path for the University Link schedule (above) derives from the completion of the cross passages and finishes between CHS to PSST (U230), to the installation of track, communication cabling and commissioning. Critical contract interfaces for cable and equipment installation by U830 have been included in the Coordinated Installation Program assigned to both the station contractors. Progress will continue to be monitored closely.

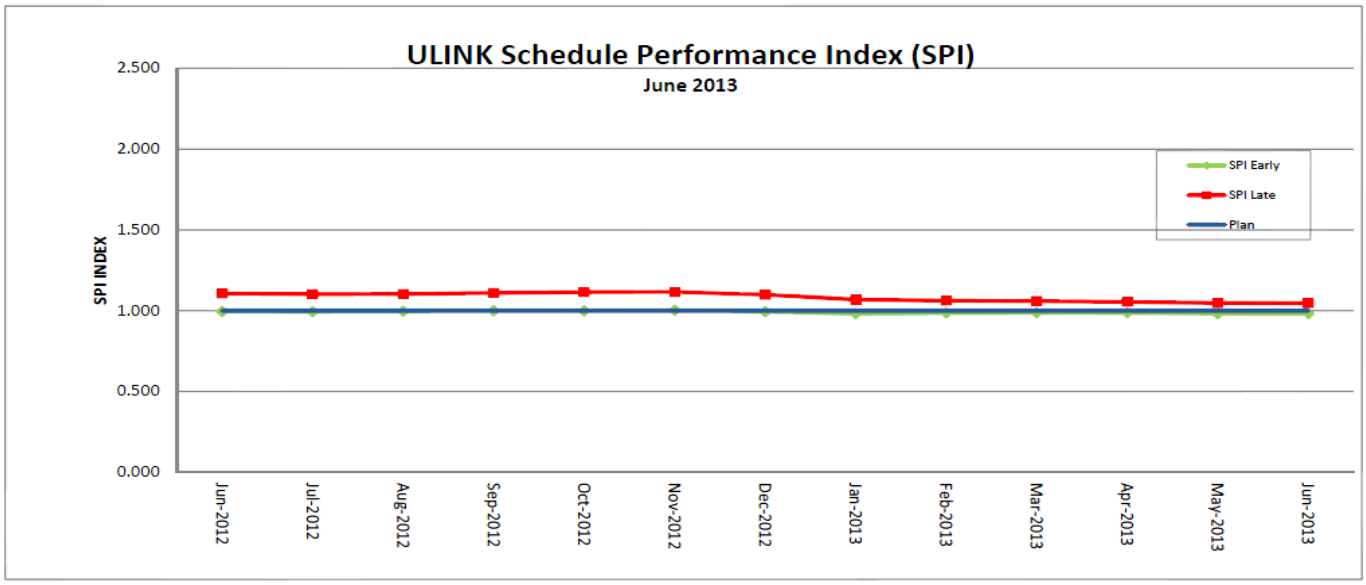
U-Link project float contingency remains at 169 days as the major tunnel contractors near completion of their contracts and systems and station contractors commence work. No additional delays occurred this period. Progress will continue to be monitored closely.



Schedule Performance Index

The Schedule Performance Index (SPI) for U-Link remains the same this period at .98 due to the slow procurement of equipment and commencement of work activities on the U830 contract.

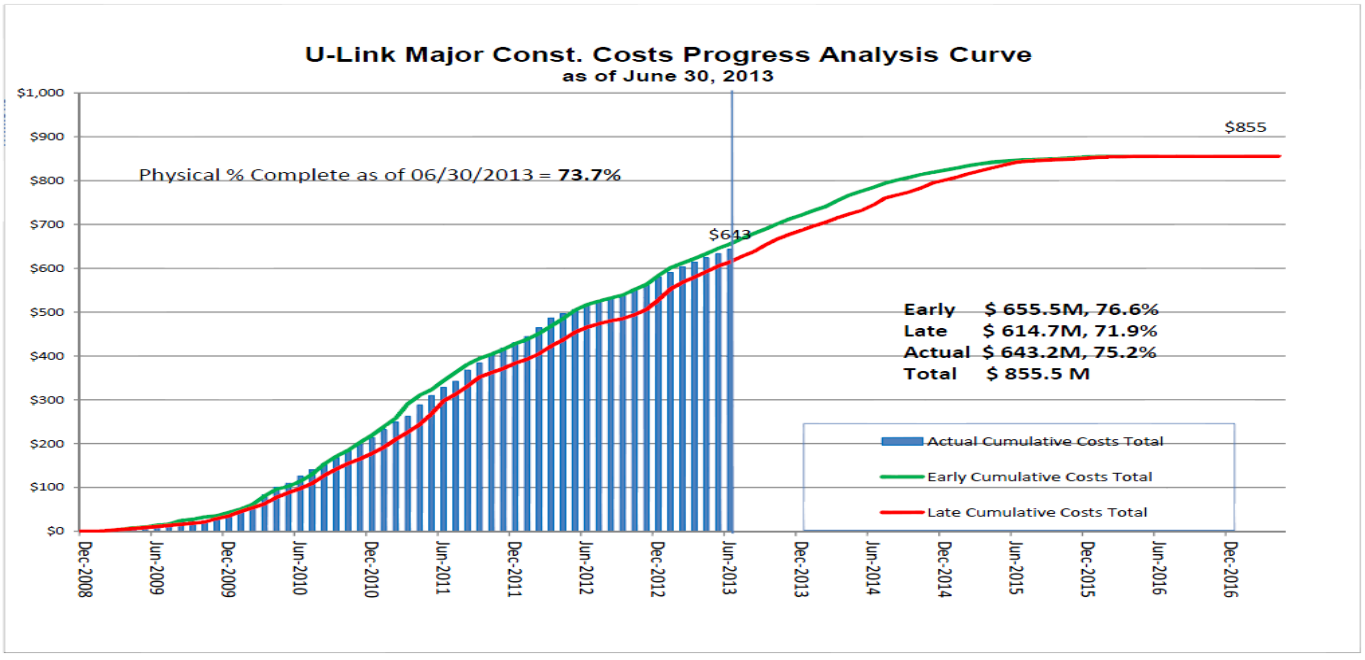
(See details on individual contract sections.) Progress will continue to be monitored closely.



Cost Progress Analysis

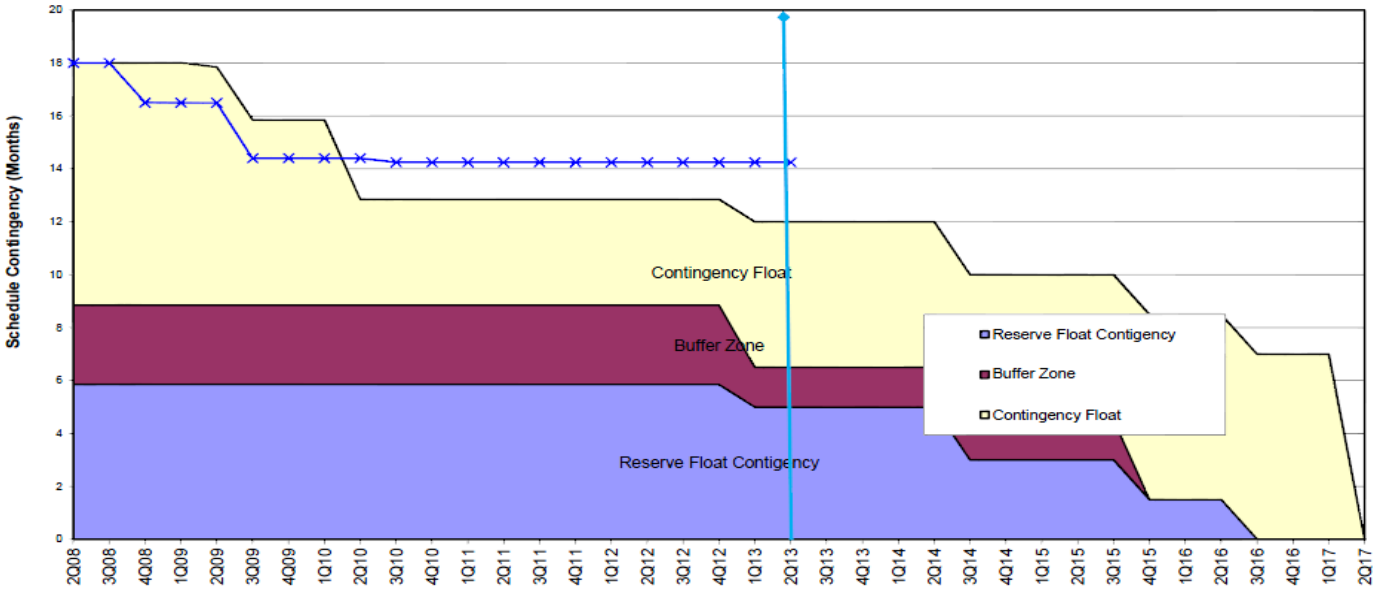
At U220, achieved Substantial Completion this period. U230 achieved Substantial Completion in March. U240 and U830 have both mobilized on site and construction activities are well underway. U250 continues to progress ahead of schedule.

Overall U-Link physical % complete is at 73.7%. Below is a graphical representation of the progress of major construction contracts cost compared to the early/late projections.



Schedule Contingency Management

The "Minimum Schedule Contingency Curves" were established in the Project Execution Plan (PEP). The PEP segregated Schedule Contingency into "Forced Lag," which is a built-in float on the Critical Path; "Buffer Float," which is the duration between Sound Transit's targeted Revenue Operation Date and the Schedule Revenue Operation Date; "Contingency Float," which is the duration between Sound Transit targeted Revenue Operation Date and the FFGA Revenue Operation Date, and "Desired Minimum Float" which is the amount of schedule float the FTA requires Sound Transit to maintain. The current schedule contingency balance continues to be 14 months, 6 months above the "Desired Minimum Float" required by the PEP.



Right-of-Way

The U-Link project involved the acquisition of a range of property interests, including fee takings for stations and staging areas, tunnel easements for the running tunnels, acquisitions from the University of Washington and airspace leases with the Washington Department of Transportation. These acquisitions required relocation of 141 owners and tenants. The right-of-way program status is summarized below.

Line Section	Total Parcels Certified	Offers Made	Signed Agreements	Admin. Settlements	Possession and Use	Closings to date	Relocations Required	Relocations Completed
Capitol Hill Station	19	19				19	140	140
Tunnel Easements	223	222				222	1	1
TOTAL	242	241				241	141	141

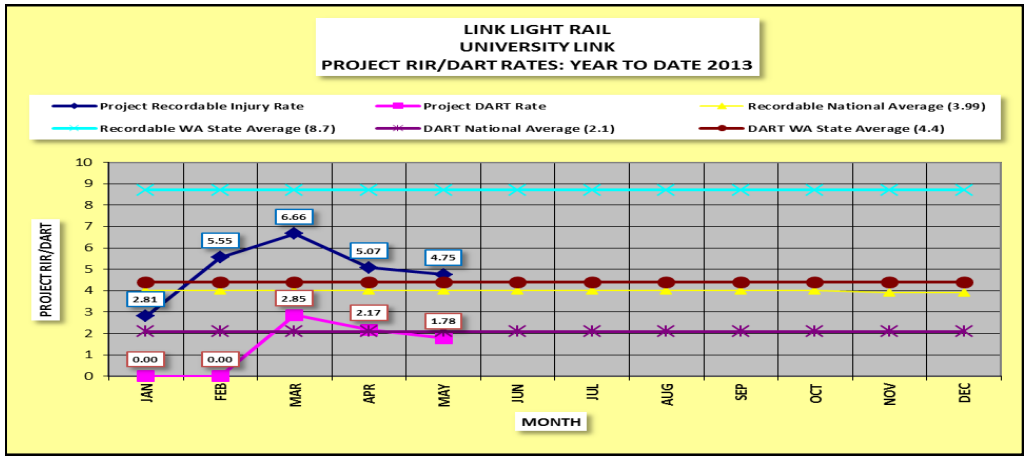
Capitol Hill Station: The acquisitions and relocations for the station site are complete.

Tunnel Easements: All 222 parcels have closed. A WSDOT parcel continues to be in pending status; Sound Transit may not need this parcel for the project.

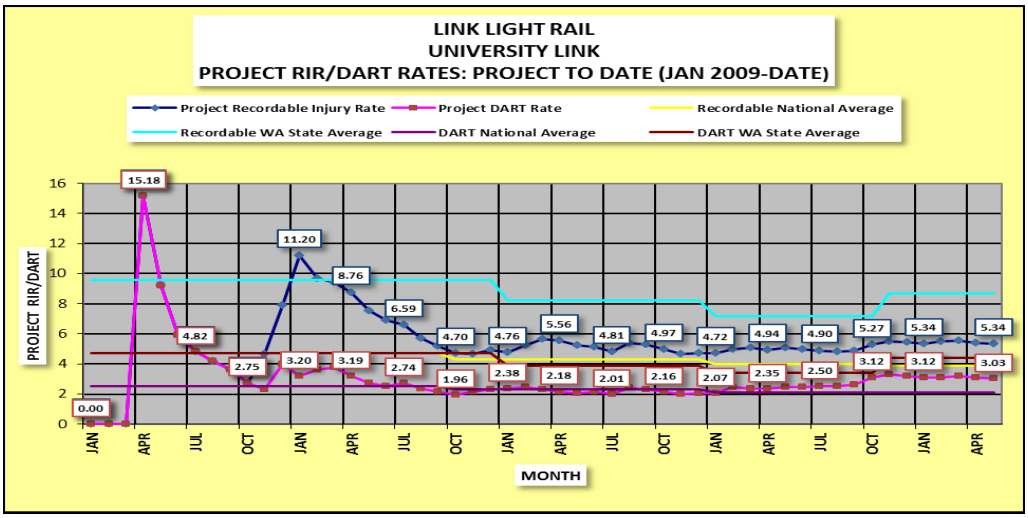
Construction Safety

Safety statistics for the reporting period and year-to-date are summarized in the table and charts.

Data/Measure	June 2013	Year to Date	Project to Date
Recordable Injury/Illness Cases	1	8	67
Days Away From Work Cases	0	1	14
Total Days Away From Work	31	111	573
Restricted or Modified Work Cases	0	2	24
Total Days Restricted or Modified Work	13	258	1296
First Aid Cases	0	7	108
Reported Near Mishaps	4	20	189
Ave. Nos. of Employees on Worksite	303	-	-
Total # of Hours (GC & Subs)	60,684	336,578	2,511,086
OSHA Incident Rates	**Monthly Average**	**Year to Date**	**Project to Date**
Recordable Injury Rate	3.30	4.75	5.34
DART Rate	0.00	1.78	3.03
Recordable National Average	3.90	3.90	3.90
DART National Average	2.10	2.10	2.10
Recordable WA State Average	8.70	8.70	8.70
DART WA State Average	4.40	4.40	4.40



The charts to the right show University Link's Recordable Injury Rates (*RIR*) and University Link's Days Away, Restricted or Modified (*DART*) Injury Rate as compared to the national average.



Quality Assurance Activities

Activities

- U220 - Material Review Board (MRB) approved 3 NCRs for Repair; EMI trench out of tolerance and concrete spalling; MRB approved 1 NCR for Use-As-Is; TBM out of tolerance.
- U240 - Attended Readiness Review Meeting for the south interior wall construction; Performed QA Surveillance on South Interior Wall Pour.
- U830 – Attended evaluation meeting for Software QA Consultant proposals identified one consultant to award the contract and performed a reference check on their past projects; Issued QA Surveillance Report for 26kV Cable Trench Concrete Pour; Performed QA Surveillance of Test Concrete Plinth Pour; Attended Track Inspection training class.

Issues

- None to report.

Summary

Description	June 2013	Notes
No. of Audits Planned	0	None
No. of Audits Completed	0	None
Reports in Progress	0	None
No. of Audits Postponed	0	None

Community Outreach

- Emailed construction alert to the U District email list concerning the upcoming utility relocation work.
- Emailed the U-Link Project Update to project stakeholders and posted on the website.
- Prepared an outreach plan for rail delivery to the UWS site scheduled next period.

Capitol Hill Business Mitigation

- Held a Business Technical Assistance luncheon at Seattle Central Community college with over 20 Capitol Hill business owners in attendance.
- ST/Chamber business mitigation steering committee met this period.
- Scheduled meeting with the University District Livability Partnership to discuss business mitigation during construction.
- Attended the Greater Seattle Business Association event to represent ST and partners.
- Finalized partnership with Three Dollar Bill Outdoor Cinemas.

Sound Transit Board Actions

Board motions and resolutions directly related to University Link are summarized in the table below.

Motion Number	Description	Date
	None to report.	

Environmental

- Stormwater and industrial waste discharge permit compliance, along with the hazardous materials oversight, continue for the U-Link construction sites.

Early Works Contracts (U210, U211 & U215)

Early work contracts have been completed.

For the U210 Contract (Advanced Utility Relocation), Final Acceptance issued in May 2011. Finalizing remaining closeout items.

For the U211 Contract (Demo and Environmental Remediation), Final Acceptance has been reached.

For the U215 Contract (I-5 Crossing), All issues in this contract have been resolved.

U220 Contract - *TBM Tunnel (UWS to CHS)*

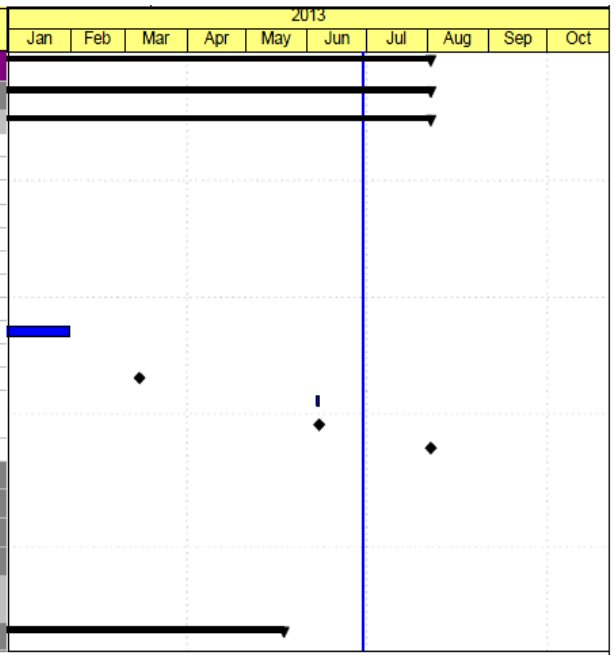
Current Progress

The U220 contract achieved Substantial Completion this period on June 7, 2013. Closeout of the contract has commenced.

Schedule/Critical Path

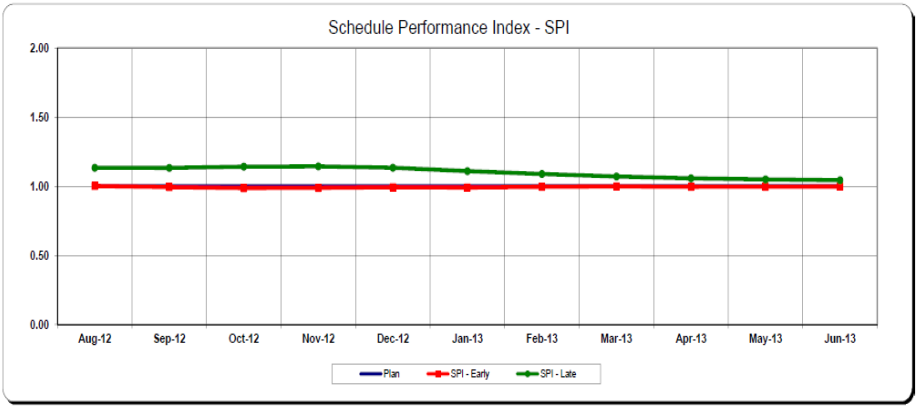
Substantial completion was achieved this period. Closeout activities will continue.

Activity Name	Start	Finish
ULINK U220 - Construction - TBM Tunnels - UWS to CH!	25-Mar-09 A	02-Aug-13
PROJECT	25-Mar-09 A	02-Aug-13
Contract Milestones	25-Mar-09 A	02-Aug-13
Bid Opening Date	25-Mar-09 A	
Limited Notice to Proceed -LNTP	05-Jun-09 A	05-Jun-09 A
Period LNTP to Access to Site	06-Jun-09 A	04-Jan-10 A
Access to Site - NTP	04-Jan-10 A	
Milestone #1 (NTP+180 days)		08-May-10 A
Milestone #2 (NTP+455 days + 4 Days #30 + 4 Days #31)		29-Mar-11 A
Area G1 Handover from JCM	29-Feb-12 A	29-Feb-12 A
Occupation of Capitol Hill Station - G1a	29-Feb-12 A	31-Oct-12 A
Occupation of Capitol Hill Station - G (Feb 01, 2013)	02-Jul-12 A	31-Jan-13 A
Milestone #3 (NTP+945 days + 2 Days #28+ 4 Days #30 + 4 Days #3		30-Sep-12 A
Milestone #5 (Handover of Staging Area to U250 - (March 09, 2013)		08-Mar-13 A
Sound Transit Controlled Float (-4days #31; -4days RFC113; -1day CH	06-Jun-13 A	07-Jun-13 A
Milestone #4 Substantial Completion (NTP+1280 days) [07/07/2013]		07-Jun-13 A
Final Completion (NTP+1367 days) [10/02/2013]		02-Aug-13*
Slurry Wall	28-Jul-10 A	28-Mar-11 A
UW Station Excavation & Bracing	01-May-10 A	31-Mar-11 A
UWS Invert Concrete	01-Sep-10 A	23-Mar-11 A
Tunnel Boring - Mining	02-Apr-11 A	05-Apr-12 A
TBM Mining - Southbound	02-Apr-11 A	21-Mar-12 A
TBM Mining - Northbound	18-Apr-11 A	05-Apr-12 A
Crosspassage Intial Support & Excavation	09-Sep-11 A	20-May-13 A



Schedule Performance Index

The U220 Schedule Performance Index (SPI) is 1.00. Substantial completion was achieved this period.



Key Activities

Current Period

- Achieved Substantial Completion on June 7, 2013.
- Continued to demobilize site.
- Continued cleanup at UW shaft.
- *Jet Grout Block*: Continued chemical grouting.
- *Tunnels:* Completed pre-handover punch list walk-throughs with U830 and U250. Continued pre-punch list concrete repair work, tunnel leak repair, and electrical and mechanical pre-punch list work. Completed commissioning and testing of corrosion control system and completed installation of fire alarm system and commenced testing and commissioning.
- *Cross passages:* Continued testing and commissioning of doors and spile repairs and leak mitigation.

Next Period

- Complete punch list .
- Continue close-out activities.

Closely Monitored Issues

- U220 subcontractor Hayward-Baker is working on removal of the stuck drill steel in the jet grout block wall.

Cost Summary

Present Financial Status	Amount
U220 Contractor— Traylor Frontier-Kemper Joint Venture (TFK)	
Original Contract Value	$309,175,274
Change Order Value	$11,839,513
Current Contract Value	$ 321,014,787
Total Actual Cost (Amount Billed)	$ 314,433,256
% of Authorized Billed to-date	97.9%
Physical Percent Complete:	99.9%
Authorized Contingency	$30,917,527
Contingency Drawdown	$11,839,513
Contingency Index*	2.61

**Physical % complete / % contingency drawn down*

View of tunnels in the UWS shaft.

U230 Contract - *TBM Tunnel (CHS to PSST)*

Current Progress

Substantial Completion was in March 2013. The Contractor completed the punchlist items and continued working on final documentation. Work is 100% complete.

Close-out Activities

Current Period

- Substantial Completion achieved on March 13, 2013.
- *Cross passages:* There are no specific areas of concern although regular inspections are still being conducted by the CM team to monitor all cross passages through Acceptance.
- The Contractor continues to work on submitting the final close out materials needed to obtain Acceptance, such as As-built Drawings, O& M Manuals, Warranties, etc.

Next Period

- *Cross Passages:* CM Team to continue to monitor for leaks or dampness through Acceptance.
- *Close-out Activities:* Continue working on close out material, including submittal of all as-built drawings, all contractual affidavits, warranties, O&M Manuals, etc.

Closely Monitored Issues

- No issues to report.

Cost Summary

Present Financial Status	Amount
U230 Contractor— JCM Joint Venture	
Original Contract Value	$153,556,000
Change Order Value	$9,865,673
Current Contract Value	$163,421,673
Total Actual Cost (Amount Billed)	$156,859,970
% of Authorized Billed to-date	96%
Physical Percent Complete:	100%
Authorized Contingency	$15,355,600
Contingency Drawdown	$9,865,673
Contingency Index*	1.56

**Physical % complete / % contingency drawn down*

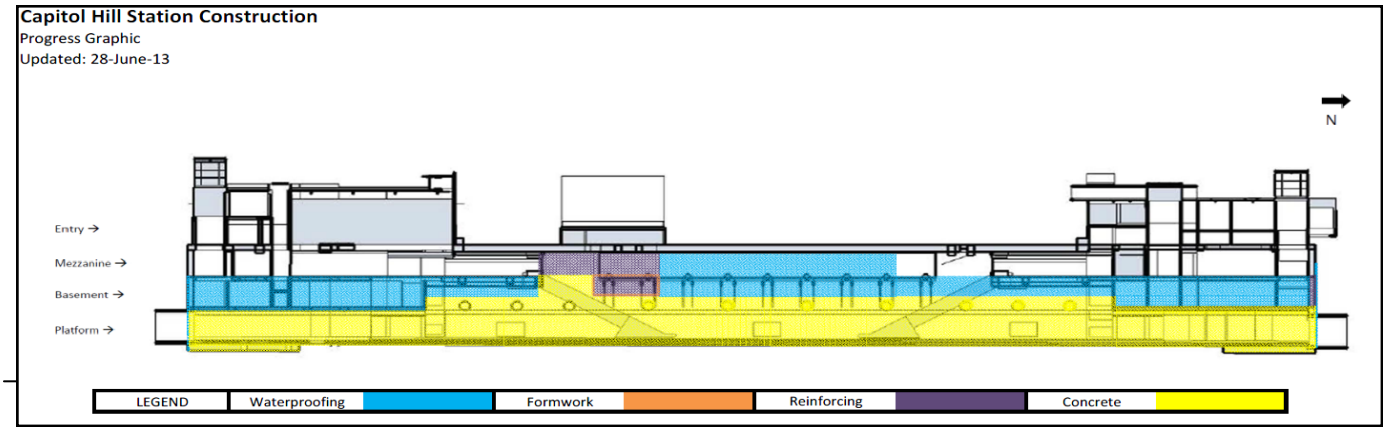
Completed SB tunnel.

U240 Contract – *Capitol Hill Station*

Current Progress

The U240 Contractor has fully mobilized on site. As of the start of construction in the Central Area, 10 major wall pours were completed and basement pours are now underway Work is also taking place in the North End and South End of the project. Shoring for the basement level decks are being erected as well as deck pours in the North end. The U830 Contractor arrived on site to weld and charge rail into the tunnels and is now complete. The schedule update for this period is reporting one day of float to Milestone #3, Room Access Completion, and Milestone #4, Substantial Completion, is reporting negative float due to some logic errors in the commissioning schedule.

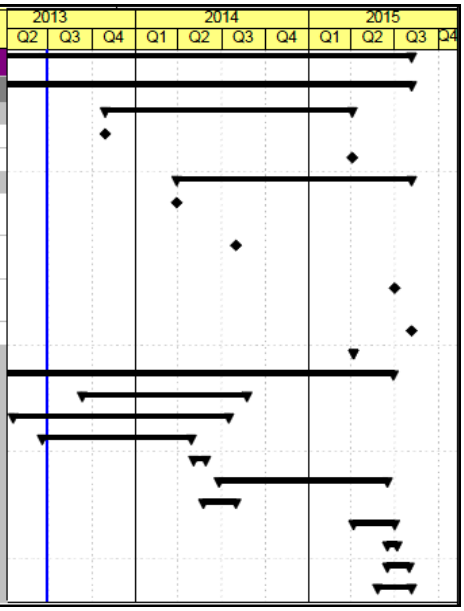
Physical % complete is at 16% against 23% contract time expended.



Schedule/Critical Path

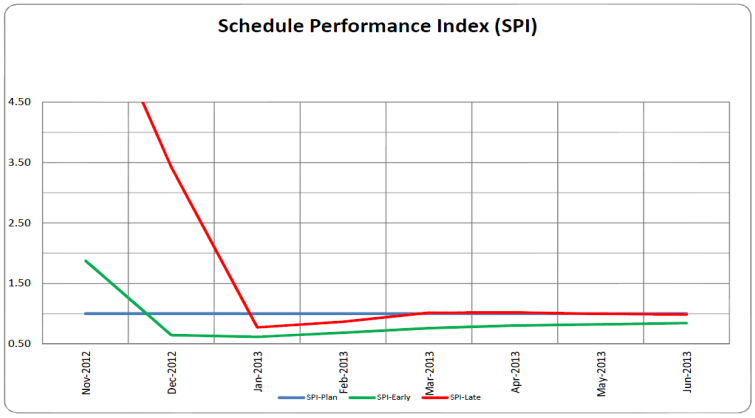
The Contractor has fully mobilized on site and work is also taking place in the North End and South End of the project. The critical path will continue through the central structure to the south end and into architectural finishes as the Contractor completes the systems rooms for turnover to U830 Contractor, Milestone #3, Room Access Completion, which is reporting 2 days of float. The Coordinated Installation Program may resolve this constraint by utilizing a phased approach to system room access. The access constraints at Pine Street will remain the driver to Substantial Completion but may be mitigated in the future by the Coordinated Installation Program as both contractors continue discussions.

Activity ID	Activity Name	Start	Finish
ULINK U240 - Construction - Capitol Hill Station - Master		26-Nov-12 A	07-Aug-15
CAPITOL HILL STATION CONSTRUCTION - U240		26-Nov-12 A	07-Aug-15
NOTICE TO PROCEED (WORK SEQUENCE CONSTRAINTS 1.09)		28-Oct-13	04-Apr-15
NTP-151	NTP: SITE ACCESS AREA "D"- (04-NOV-2013)	28-Oct-13*	
NTP-160	NTP: SITE ACCESS FOR PINE STREET (04-APR-2015)	04-Apr-15*	
CONTRACT MILESTONES (WORK SEQUENCE 1.08)		28-Mar-14	07-Aug-15
MS-2	MILESTONE 2: BASIC CHS STRUCTURE COMPLETION (Finish On Or Before 2-APRIL-2014)		28-Mar-14*
MS-3	MILESTONE 3: ROOM ACCESS COMPLETION (Finish On Or Before 2-AUG-2014)		30-Jul-14*
MS-1	MILESTONE 1: PINE STREET SHAFT BELOW ELEV 130 (2-JULY-2015)		02-Jul-15*
MS-4	MILESTONE 4: SUBSTANTIAL COMPLETION (1-AUG-2015)		07-Aug-15*
OTHER MILESTONES (WORK SEQUENCE CONSTRAINTS 1.09)		05-Apr-15	05-Apr-15
MOBILIZATION-GENERAL CONDITIONS-PROJECT COORDINATION		26-Nov-12 A	30-Jun-15
PERMITS		10-Sep-13	24-Aug-14
STRUCTURAL WORK		17-Apr-13 A	16-Jul-14
LONG LEAD MECHANICAL EQUIPMENT		17-Jun-13 A	28-Apr-14
PLUMBING AND MECHANICAL ROUGH-IN AND FINISHES		02-May-14	27-May-14
MEPS		26-Jun-14	15-Jun-15
ARCHITECTURAL AND FINISHES		22-May-14	30-Jul-14
PINE STREET CONNECTOR TUNNEL		06-Apr-15	02-Jul-15
PUNCH LIST WORK		16-Jun-15	07-Jul-15
FINAL INSPECTIONS		16-Jun-15	31-Jul-15
COMMISSIONING		26-May-15	07-Aug-15



Schedule Performance Index

U240 is trending behind due to material procurement activities from structural steel, rebar, and vertical transportation equipment. As a result, the SPI based on early forecast is below 1.0 at 0.84. Production levels and material procurement will continue to be monitored closely.



Key Activities

Current Period

- General Contractor completed the north area G basement level slab and successfully moved Peri Traveler Form Set from the platform level up to the Basement level. They continued installation of the east and west concrete walls in areas A, C, & G.
- Continued installation of waterproofing felt, membrane and the protection layer in central Areas A of the basement/mezzanine level and south Area C platform sidewalls, and north area G.
- Reinforcing subcontractor continued fabrication of rebar mats on the surface, placing rebar for platform and basement level pours in Areas G, A and C.
- Electrical and mechanical subcontractor's continued the south Area C platform interior wall MEP embeds.

Next Period

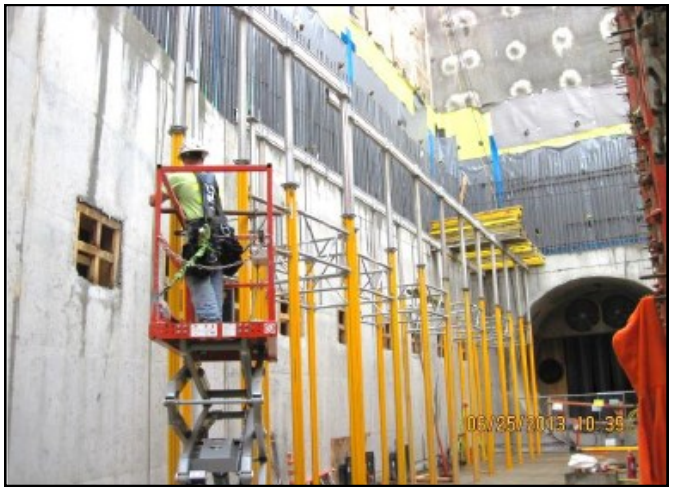
- U240 contractor will continue with the central area A, wall pours #4 & #5 of six pours, and continue with the north end basement level exterior walls in area G.
- Waterproofing subcontractor will continue installation of waterproofing felt and membrane splice work in areas A, C, & G. They will continue waterproofing from basement level to the station roof level throughout all three areas.
- Reinforcing subcontractor will continue reinforcing installation work in Areas A, C and G. They will continue fabricating wall rebar mats for the six central Area A basement level Peri Traveler concrete pours.
- In the south end Area C, the contractor will continue preparations for installation of the basement level slab. This includes top and bottom reinforcing mats, and electrical and mechanical rough-ins.

Closely Monitored Issues

- There is some uncertainty as to when the permanent power to the station will be available. Coordination continues with the U830 contractor and Seattle City Light to resolve this issue.
- Third party coordination continues in preparation for construction of the Broadway pedestrian concourse. Some permits are still outstanding and need resolution prior to beginning the work.

Cost Summary

Present Financial Status	Amount
U240 Contractor - Turner Construction Co.	
Original Contract Value	$104,850,276
Change Order Value	$323,129
Current Contract Value	$105,173,405
Total Actual Cost (Amount Billed)	$16,729,269
% of Authorized Billed to-date	15.9%
Physical Percent Complete:	15.9%
Authorized Contingency	$5,242,514
Contingency Drawdown	$323,129
Contingency Index	2.58



South deck shoring installation began.

U250 Contract –*University of Washington Station*

Current Progress

Platform topping slab at grids 2 and 3 have been placed in preparation for U830 rail charging activities next period. Elevator #1 and #2 installation commenced. U250 Contractor is now approaching Milestone #5, Systems Room Access, at UWS expected in August 2013. At the Montlake Triangle Pedestrian Bridge, falsework removal is complete and Elevator #3 structural work is underway. Work progress continued with approximately 75% physical completion against 62% contract time expended.

U250 Key Systems Rooms - Milestone #3

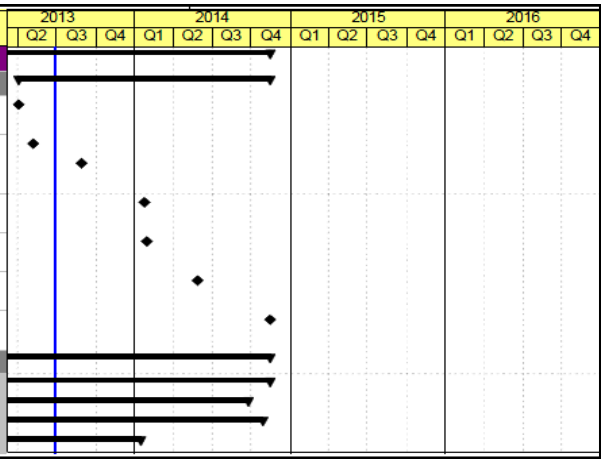
Room Number	Room Name	Location	% Complete	U250 Projected Complete*	U830 Need By**
N5-5G01	Electrical Room	Grade – MTP SP1	2%	31-JAN-2014	01-FEB-2014
N5-5G03	Fire Command Center	Grade – Bridge	90%	22-AUG-2013	01-FEB-2014
N5-5R01	Electrical Room	Roof Sector C	80%	22-AUG-2013	01-FEB-2014
N5-5R02	Elev Machine Room	Roof Sector C	50%	22-AUG-2013	01-FEB-2014
N5-5M04	Electrical Room	Mezz Sector D	85%	29-AUG-2013	01-FEB-2014
N5-5M08	Communications	Mezz Sector C	80%	22-AUG-2013	01-FEB-2014
N5-5M17	Elev Machine Room	Mezz Sector B	75%	29-AUG-2013	01-FEB-2014
N5-5M20	Communications	Mezz Sector B	70%	29-AUG-2013	01-FEB-2014
N5-5B1-11	Electrical Room	BL1 Sector A	77%	16-OCT-2013	01-FEB-2014
N5-5B3-01	Fire Valve Room	BL3 Sector D	92%	15-AUG-2013	01-FEB-2014
N5-5B3-08	Corridor Vestibule	BL3 Sector C	30%	15-AUG-2013	01-FEB-2014
N5-5B3-11	Switchgear / TPSS	BL3 Sector A / B	25%	31-JUL-2013	01-FEB-2014
N5-5B3-16	Communications	BL3 Sector B	35%	31-JUL-2013	01-FEB-2014
N5-5B3-22	Electrical Room	BL3 Sector A	25%	29-AUG-2013	01-FEB-2014
N5-5B3-24	Electrical Room	BL3 Sector A	0%	31-JUL-2013	01-FEB-2014
N5-5P02	Electrical Room	Platform Sector D	92%	15-AUG-2013	01-FEB-2014
N5-5P09	Communications	Platform Level B	20%	28-AUG-2013	01-FEB-2014
N5-5P15	Signal Room	Platform Sector B	35%	28-AUG-2013	01-FEB-2014
N5-5P21	Electrical Room	Platform Sector A	0%	22-JAN-2014	01-FEB-2014
N5-5M14	SCL Meter Room***	Mezz Sector B	75%	29-AUG-2013	01-FEB-2014
N5-5B3-20	Substation Room***	BL3 Sector B	50%	29-AUG-2013	01-FEB-2014

Schedule/Critical Path

Milestone #1, Basic Structure Complete, is now complete. Milestone #3, UWS room access, is reporting 3 days of positive float and Milestone #7, Substantial Completion, is reporting no float. The Contractor is meeting production forecasts at this time.

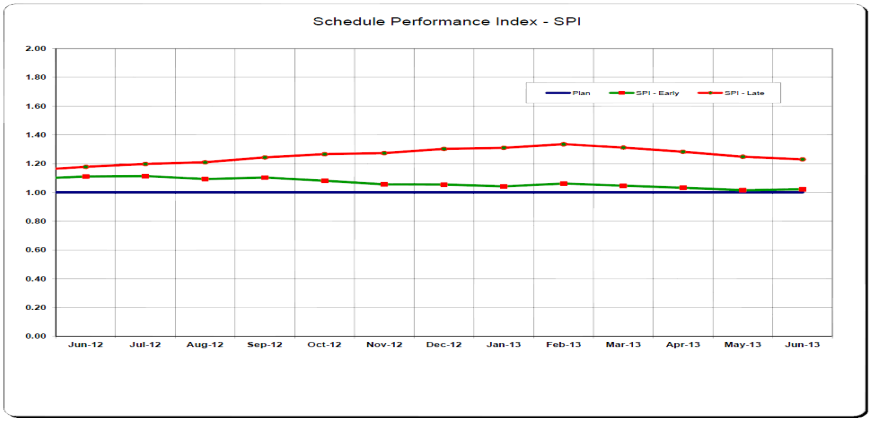
The critical path continues through the installation of the station roof slabs, basement level and platform floor slabs under a modified top down construction plan. The U250 Contractor continues work on the crossover area and is expected to mobilize into Grid 1 to 3 next period as U220 achieves Substantial Completion. Systems critical rooms will be made available to the U830 Systems Contractor, as the station and crossover nears completion. Final testing and commissioning will then complete the U250 work.

Activity Name	Start	Finish
ULINK U250 - Construction - UW Station	05-Apr-11 A	14-Nov-14
MILESTONES	01-Apr-13 A	14-Nov-14
MILESTONE 1 (727d FROM NTP) (31 Mar 13) ACHIEVE BASIC STRUCTURE COMPLETION OF STATION		01-Apr-13 A
MILESTONE 2 (60d FROM OCC OF EAST BOUNDARY F3) (01 Apr 13)		06-May-13 A
MILESTONE 3 (880d FROM NTP) (31 Aug 13) UWS ROOM ACCESS COMPLETION		29-Aug-13*
MILESTONE 4 (1031d FROM NTP) (29 Dec 13) BASIC STRUCTURE COMPLETION OF ENTIRE UWS FOR USE BY SYSTEM WIDE		23-Jan-14*
MILESTONE 5 (1033d FROM NTP) (31 Jan 14) UWS ROOM ACCESS COMPLETION FOR ALL SYSTEM ROOMS		30-Jan-14*
MILESTONE 6 (1160d FROM NTP) (07 Jun 14) RESTORATION OF THE SITE OUTSIDE OF THE CONSTRUCTION WORK AREA		29-May-14*
MILESTONE 7 SUBSTANTIAL COMPLETION OF ALL WORK (1320d FROM NTP) (14 Nov 14) SUBSTANTION COMPLETION OF ALL WORK		14-Nov-14*
CONSTRUCTION	05-Apr-11 A	14-Nov-14
STATION	05-Apr-11 A	14-Nov-14
CROSSOVER	01-Aug-12 A	23-Sep-14
ABOVE GRADE ENTRY	31-Aug-12 A	27-Oct-14
PEDESTRIAN BRIDGE	29-Feb-12 A	13-Jan-14



Schedule Performance Index

The U250 Schedule Performance Index (SPI) remains above a 1.00 at 1.02 this period. Construction progress is trending ahead of the plan. The current schedule update indicates that the Contractor is ahead of schedule.



Key Activities

Current Period

- Continued overhead HVAC, electrical, plumbing and sprinkler rough-ins and mechanical insulation with heat trace installation for piping in the basement and mezzanine levels.
- Continued CMU and cement board walls.
- Continued installation of Elevator 1 & 2 machine room.
- *Montlake Triangle Project, SP-1 Pedestrian Bridge:* Continued formwork and reinforcing for elevator/Stair 3 structure. Continued Montlake center footing demolition, restoration and lane re-striping. Stressed and grouted post-tensioning cables for Frame 2 superstructure.

Next Period

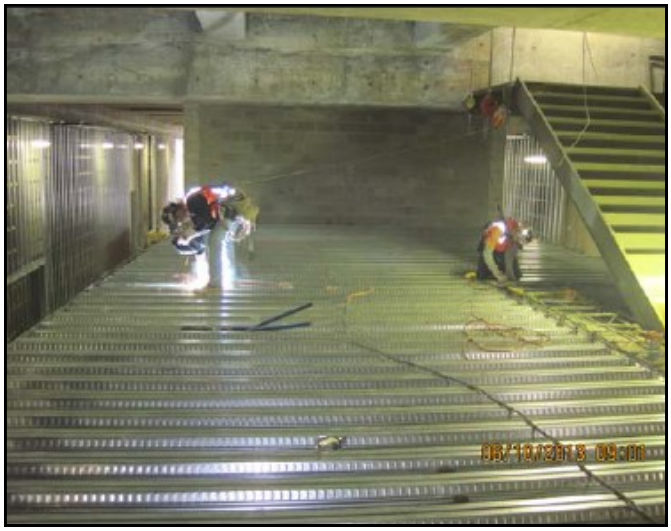
- Continue CMU and Cement Board Walls in various sections and Basement Levels**.**
- U220 Contractor to begin demobilization and final handover of remaining areas to U250 Contractor who will then mobilize to the south end of the station box for completion of platform –level topping slab.
- Continue overhead HVAC, electrical, and plumbing activities in basement and mezzanine levels.
- Continue installation of Elevator 1 & 2.
- *Triangle Project, SP-1 Pedestrian Bridge:* Continued formwork and reinforcing for elevator/stair structure and remove false work of Frame 2 bridge superstructure.

Closely Monitored Issues

- Complexity of MTP interface and coordination with UW Husky stadium renovation activity.
- Permanent power activation is needed for permit testing and commissioning activities. U250 Contractor is coordinating with SCL and U830 Contractor for possible early energizing of permanent power. U250 and U830 contractors accommodating necessary design changes and ST Designer is proceeding with design development.

Cost Summary

Present Financial Status	Amount
U250 Contractor - Hoffman Construction Co.	
Original Contract Value	141,745,898
Change Order Value	2,212,313
Current Contract Value	143,958,211
Total Actual Cost (Amount Billed)	99,007,490
% of Authorized Billed to-date	69%
Physical Percent Complete:	69%
Authorized Contingency	7,087,295
Contingency Drawdown	2,212,313
Contingency Index	2.22



Metal decking above the platform ancillary rooms.

U820 Contract - *LRV Storage and Yard Expansion*
U830 Contract - *Track, Signal, Traction power and Communications Systems*
P821 Contract - *Light Rail Vehicles*
C802 Contract - *Signals Systems*

Key Activities

Current Period

U820- LRV Storage and Yard Expansion
- Completed all work.

P821 – Light Rail Vehicles
- Continued warranty activities.
- Continued minor change order activities.

C802 - Signals System
- Completed all work.

Other Systems
- Substantial Completion has been issued to U860 Network Fiber Network.
- Continued coordination of Agency initiated system network standardization.
- Continued manufacturing, staging and pre-installation activities for U826 Radio Console upgrade.

Next Period

P821 – Light Rail Vehicles
- Continue warranty activities.
- Continue minor change order activities.

Other Systems
- Continue coordination of Agency initiated system network standardization.
- Continue manufacturing, staging and pre-installation activities for U826 Radio Console upgrade.

Closely Monitored Issues

- None to report this period.

P821 Cost Summary

Present Financial Status	Amount
P821 Manufacturer — Kinkisharyo Intl.*	
Original Contract Value (U-Link Option)	$94,576,095
Change Order Value	$4,598,480
Current Contract Value	$99,174,575
Total Actual Cost (Incurred To Date)	$98,643,296
% of Authorized Billed to-date	99.5%
Financial Percent Complete:	100%
Authorized Contingency	$4,608,904
Contingency Drawdown	$4,598,480
Contingency Index	N/A

**Change Order to Initial Segment LRV Contract*

C802 Cost Summary

Present Financial Status	Amount
C802 Train Control —GETS* Global Signaling, LLC	
Original Contract Value (U-Link Option)	$1,996,269
Change Order Value	$15,390
Current Contract Value	$2,011,659
Total Actual Cost (Incurred To Date)	$1,949,694
% of Authorized Billed to-date	98%
Physical Percent Complete:	~99%
Authorized Contingency	$103,731
Contingency Drawdown	$15,390
Contingency Index	N/A

**Change Order to Initial Segment Train Control Contract.*
55% of contract costs are assigned to U-Link 45% Northgate Link.

U830 Contract – *Track, Signal, Traction Power and Communications*

Current Progress

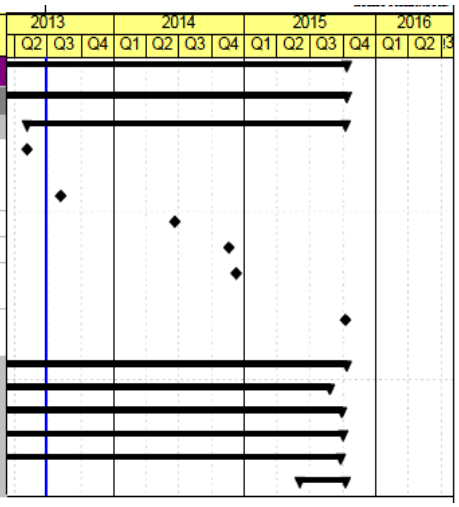
The U830 has now commenced the installation of rail and plinth in the CHS to PSST tunnel. Rail welding and charging was completed at Capitol Hill Station site last period and 26kv cable installation is now complete. Rail charging at UW station is expected next period. Construction submittal preparation is ongoing. Work progress continued with approximately 11% physically complete against 20% contract time expended.

Schedule/Critical Path

Milestone #5 (Installation and Testing of existing Alignment Retrofit) is now two days of positive float. Milestone #6 Substantial Completion is reporting two days of positive of float. Systems Room Access at CHS is driving U-Link segment Communications Installation through systemwide testing. Contractor production rates and construction submittals are being tracked closely.

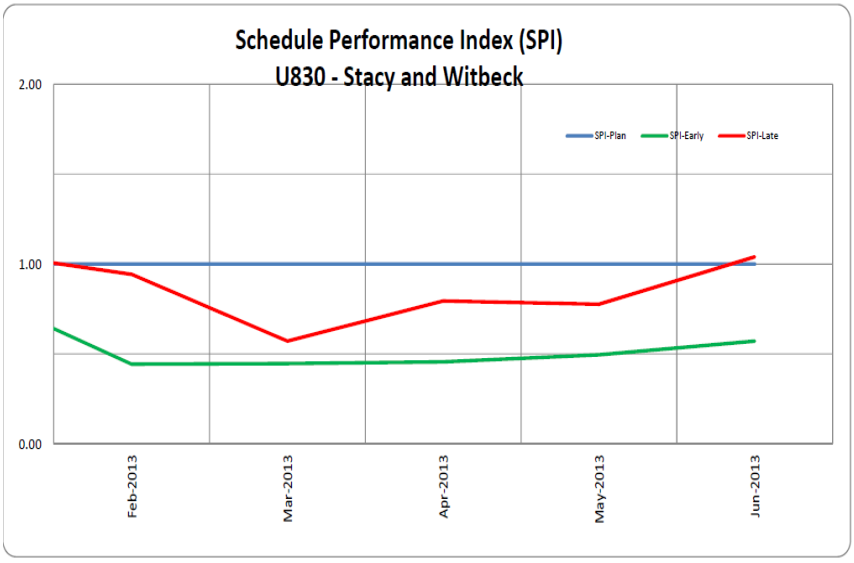
The Critical Path #1 runs through design submittals and communications equipment procurement and initial segment retrofit through system wide testing and substantial completion. Critical Path #2 runs through system room access in July 2014 at CHS for communication cabling and equipment installation. The Coordinated Installation Program may resolve this constraint by utilizing a phased approach to system room access.

Activity Name	Start	Finish
ULINK U830 - Constsruction - Track and Systems - Master	01-Nov-12 A	12-Oct-15
Construction Services	01-Nov-12 A	12-Oct-15
Major Milestones	02-May-13 A	09-Oct-15
Milestone 1: Complete Work for Rail Distribution @ Capitol Hill Station Site		02-May-13 A
Milestone 2: Complete Work for Rail Distribution @ UWS		06-Aug-13*
Milestone 4: Complete Work & Testing for AC Circuit Breaker Switchgear @ UWS		19-Jun-14*
Milestone 3: Complete Work & Testing for AC Circuit Breaker Switchgear @ CHS		18-Nov-14*
Milestone 5: Substantial Completion of Installation & Testing to Commission Existing Alignment Retrofit		08-Dec-14*
Milestone 6: Substantial Completion of Installation & Testing to Commission U-Link Alignment		09-Oct-15*
Trackwork	11-Dec-12 A	12-Oct-15
OCS	11-Dec-12 A	24-Aug-15
Traction Power / Substations	11-Dec-12 A	28-Sep-15
Signals	11-Dec-12 A	30-Sep-15
Communication	01-Nov-12 A	25-Sep-15
Testing and Commissioning	02-Jun-15	09-Oct-15



Schedule Performance Index

The U830 Schedule Performance Index (SPI) continues to rise slightly this period due to an increase in construction activities but is reporting below a 1.00 at 0.6. Rail Charging at CHS was completed and plinth and rail installation has commenced in the CHS to PSST. 26kv cable installation is also complete in these segments. SCADA Submittals and material procurement activities are driving the critical cutover of initial segment. Systems access at U240 is driving Comm Equipment installation. Production levels and material procurement will continue to be monitored closely.



Key Activities

Current Period

- Coordination ongoing with U240 and U250 on the coordinated installation plan for systems elements at the CHS and UWS.
- Continued weekly technical meeting with EC/CMs on the construction schedule and interfaces with Contractor.
- *Trackwork*-Completed rail distribution access at CHS and preparing plan for rail distribution at UWS. Ongoing track construction in the SB tunnel between PSST and CHS. Completed the second plinth pours and continued installing dowels, constructing skeleton track, and installing rebar and forms for additional plinth pours. Completed final mix design of floating slab for review and approval. Shipment is ongoing of rail fasteners in the tunnels.
- *Traction Power Systems/Signal/COM-SCADA Systems:* Completed installation of the 26kV cables and filling the cable trench with sand for NB and SB tunnels between PSST and CHS. Ongoing review and approval of several technical submittals and work plans. Ongoing meetings with ST Operation and King County Metro regarding SCADA retrofit.

Next Period

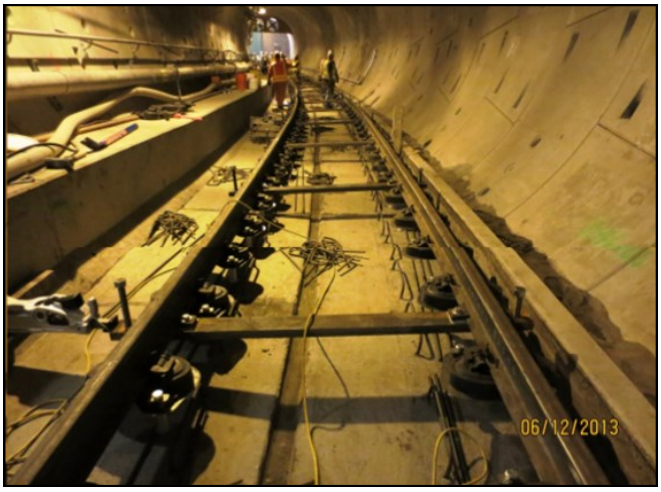
- Continue track construction in the southbound tunnel between PSST and CHS.
- Begin surface roughening, rail welding and distribution, and installation of 26kV distribution cable in the tunnels between CHS and UWS, when access to the tunnels is available in July.
- Continue delivery of rail to UWS to support welding operations and other various materials and equipment for track installation (fasteners, OTM, rebar and various cables).
- Continue weekly technical meeting with EC/CMs on the construction schedule and interfaces with Contractor.

Closely Monitored Issues

- *SCADA Cutover Plan*: CM team monitoring all of the necessary information and work plans required for the upcoming retrofit (cutover) work.
- ST continues to monitor contractor progress of the Systems Assurance submittals,. Contractor is working on a recovery plan to fulfill the contractual requirements.
- Staff continue to monitor the re-design of the floating slab and final design scheduled for July 2013.
- *Licensing Agreement provided by Subcontractor*: Subcontractor reviewed ST's comments and resubmitted for final review.

Cost Summary

Present Financial Status	Amount
U830 GC/CM Contractor - Stacy & Witbeck	
Original Contract Value	$119,167,433
Change Order Value	$269,936
Current Contract Value	$119,437,370
Total Actual Cost (Amount Billed)	$12,169,199
% of Authorized Billed to-date	10.2%
Physical Percent Complete:	9.5%
Authorized Contingency	$5,958,373
Contingency Drawdown	$269,936
Contingency Index	2.1



Fasteners set for skeleton track at southbound tunnel.

Link Light Rail
Northgate Link Extension

Scope

Limits: The Northgate Link Extension consists of 4.3 miles of light rail extending from the University of Washington to Northgate.

Alignment: The extension begins at the UW Station, boring tunnels under campus then continues north to a portal located north of NE 94th Street on the east side of I-5, then transitioning to an aerial structure running north to the Northgate Mall.

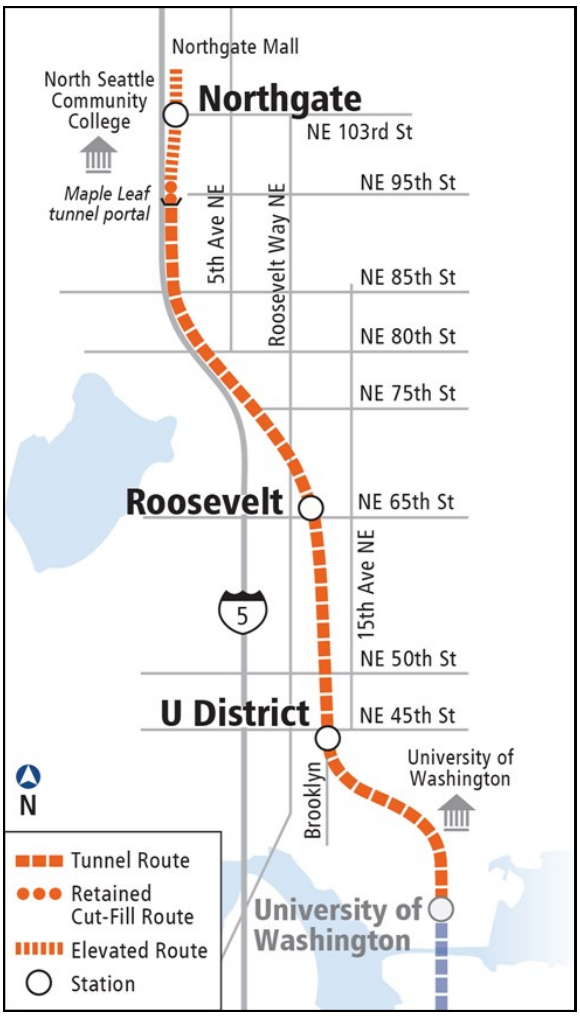
Stations: The U District station is an underground station located on the west side of the UW campus near Brooklyn Ave. and NE 45th St. The Roosevelt Station is an underground station located near NE 65th St. and 12th Ave NE. The Northgate Station is an elevated station located at the southwest edge of the Northgate Mall.

Systems: Signals, track electrification, and SCADA communications, as well as an additional 40 light rail vehicles are included.

Budget: $2.131 Billion

Service: September 2021

Phase: Final Design and early site preparation and utility relocations.



Map of Northgate Link Extension route and stations.

Key Project Activities

- Met with Seattle Department and Planning Development and discussed U District neighborhood design and planning efforts.
- Briefed Seattle Mayor McGinn on Simon Property Group (SPG) Northgate parking garage negotiations.
- Met with UW Facilities, emergency management and security reps and began discussion on communication, wayfinding and emergency response during station construction.
- ST, KCM and COS gave joint Northgate presentation to Seattle City Council Planning, Land Use and Sustainability (PLUS) committee.
- Contract N125 (TBM Tunnels) bid protest was denied. ST issued notice of intent to award JCM. N125 contract tentatively scheduled for Board review next period.
- Presented project updates to Board including design and construction progress, Northgate Station 60% design work and the Northgate access study results.
- Board approved lease/purchase of SPG's surface parking lot as WSDOT replacement parking site. The SPG representative spoke at the board meeting and expressed interest in working with ST.

Closely Monitored Issues

- Continued working with WSDOT to finalize terms and approvals of the Airspace Lease required for N125 work in WSDOT right-of-way.
- Design work has been suspended on the N160 (Aerial Guideway and Northgate Station) to accommodate further transit center design and traffic accommodations. ST continues to coordinate with KCM, WSDOT & City and expects Final Design in early July 2013.
- Continued to explore alternatives for both temporary parking replacement and permanent parking accommodations for the Northgate Station.

Project Cost Summary

The Northgate Link project cost is summarized below by two cost categorizations. In the first table, the cost is summarized in accordance with Sound Transit's Work Breakdown Structure (WBS). The second table summarizes the project in accordance with the FTA's Standard Cost Category (SCC) format. The figures in both tables are shown in millions.

Cost Summary by Phase

Project Phase	Baseline Budget	Current Adopted Budget	Commitment to Date	Incurred to Date	Estimated Final Cost (EFC)	Adopted Budget vs. EFC
ADMINISTRATION	$149.5	$149.5	$13.7	$14.5	$149.5	$0.0
PRELIMINARY ENGINEERING	$15.1	$15.1	$15.1	$15.1	$15.1	$0.0
FINAL DESIGN	$113.1	$113.1	$95.9	$56.5	$113.1	$0.0
CONSTRUCTION SERVICES	$112.1	$112.1	$75.5	$1.9	$112.1	$0.0
3rd PARTY AGREEMENTS	$11.0	$11.0	$10.1	$2.2	$11.0	$0.0
CONSTRUCTION	$1,323.5	$1,323.5	$20.4	$12.0	$1,323.5	$0.0
VEHICLES	$259.1	$259.1	$0.0	$0.0	$259.1	$0.0
ROW	$148.1	$148.1	$51.4	$50.3	$148.0	$0.0
Total	**$2,131.4**	**$2,131.4**	**$282.1**	**$152.5**	**$2,131.4**	**$0.0**

The Estimated Final Cost (EFC) for the project as of June 2013 is $2,131.4M, which is equal to the project budget. This period, approximately $2.3M was incurred, of which $756K was for final design, $284K was for construction, and $336K was for construction management. The remaining was for right-of-way, third party coordination, staff, and other direct charges.

Cost Summary by SCC

SCC Element	Baseline Budget	Current Adopted Budget	Commitment to Date	Incurred to Date	Estimated Final Cost (EFC)	Adopted Budget vs. EFC
10 GUIDEWAY & TRACK	$615.1	$615.1	$1.3	$1.3	$615.1	$0.0
20 STATIONS	$434.2	$434.2	$0.0	$0.0	$434.2	$0.0
30 SUPPORT FACILITIES: YARD, SHOP	$5.3	$5.3	$5.2	$5.2	$5.2	$0.1
40 SITEWORK & SPECIAL CONDITIONS	$64.3	$64.3	$11.5	$4.3	$64.4	($0.1)
50 SYSTEMS	$110.9	$110.9	$0.9	$0.9	$110.9	$0.0
Construction Subtotal (SCC 10 - 50)	**$1,229.9**	**$1,229.9**	**$18.9**	**$11.8**	**$1,229.9**	**$0.0**
60 ROW, LAND, EXISTING IMPROVEMENTS	$143.1	$143.1	$51.4	$50.3	$143.1	$0.0
70 VEHICLES	$236.9	$236.9	$0.0	$0.0	$236.9	$0.0
80 PROFESSIONAL SERVICES	$400.8	$400.9	$211.8	$90.4	$400.8	$0.2
90 CONTINGENCY	$120.8	$120.6	$0.0	$0.0	$120.8	($0.2)
Capital Total (SCC 10 - 90)	**$2,131.4**	**$2,131.4**	**$282.1**	**$152.5**	**$2,131.4**	**$0.0**

The Estimated Final Cost (EFC) grouped by SCC remains consistent with the Adopted Budget, with the exception of a small variance between Support Facilities (30) and Site Work (40). This variance is caused by some environmental remediation that occurred under the Yard Expansion contract.

Cost Contingency Status

The current total contingency for the project is currently $371.0 million, which is a reduction of $25.2 million from the baseline. Current total contingency is 18.7% of project work remaining.

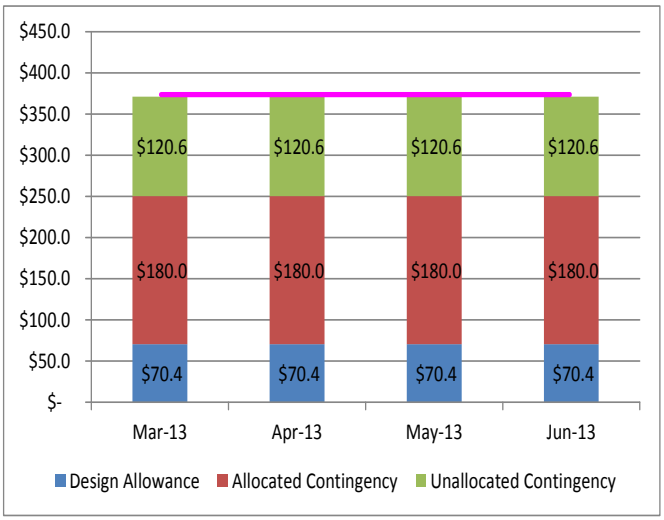
Contingency Status	Baseline		Current	
	Amount	% of Total	Amount	% of Work Remaining
Design Allowance	$ 113.9	5.3%	$ 70.4	3.6%
Allocated Contingency	$ 184.0	8.6%	$ 180.0	9.1%
Unallocated Contingency	$ 98.3	4.6%	$ 120.6	6.1%
Total	**$ 396.2**	**18.6%**	**$ 371.0**	**18.7%**

Cost Contingency Status, continued

Design Allowance – Compared to the baseline amount of $113.9M, Design Allowance has decreased by $43.5M to $70.4M, due to 100% design being achieved for contracts N110, N125 and some City of Seattle utility relocation work scopes. Design Allowance has remained the same over the last four months.

Allocated Contingency – Compared to the baseline amount of $184.0M, Allocated Contingency has decreased by $4.3M to $179.7M, due to changes order for the civil final design contract, contract procurements, and updated cost estimates. Allocated Contingency has remained the same over the last four months.

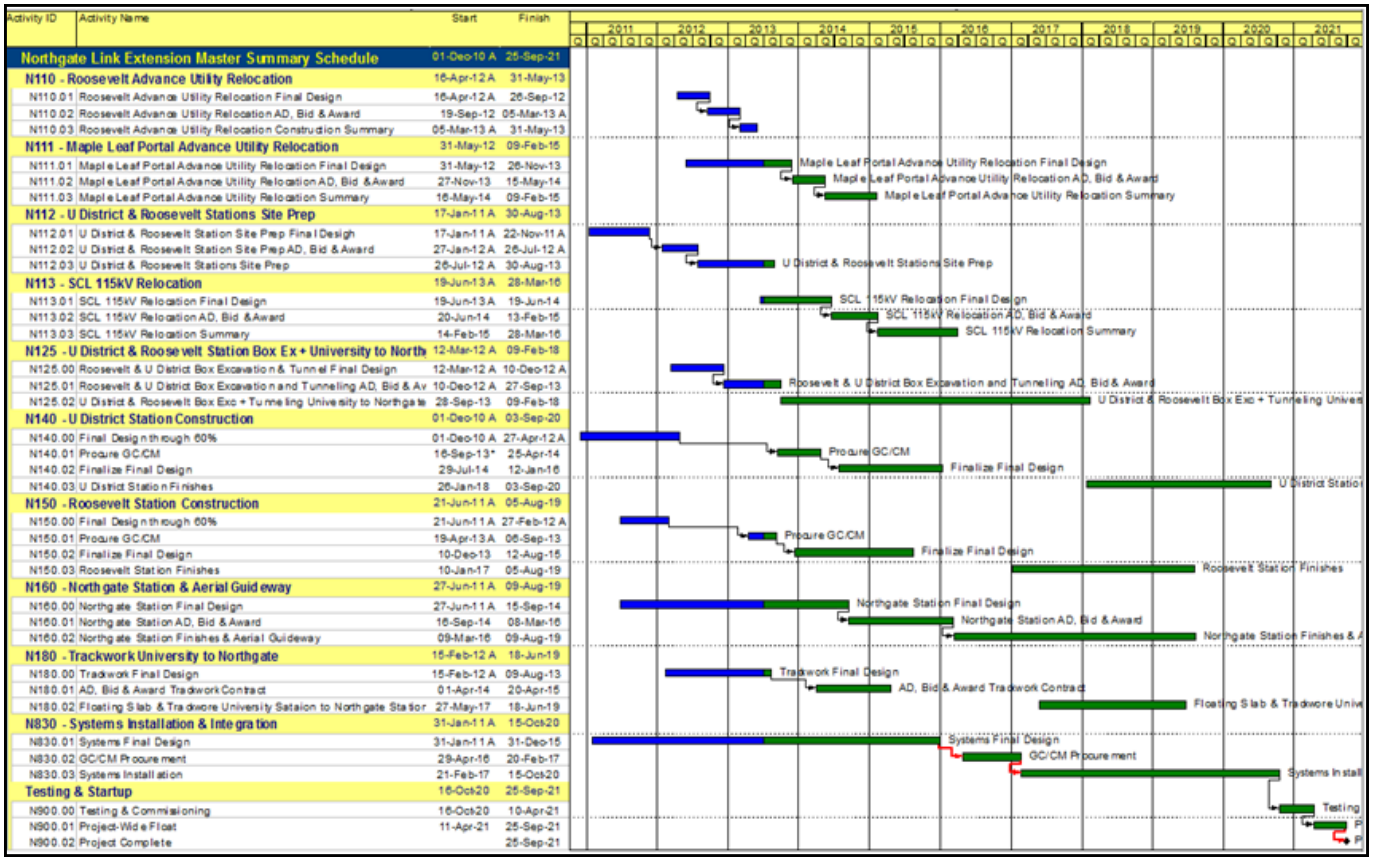
Unallocated Contingency – Compared to the baseline amount of $98.3M, Unallocated Contingency has increased by $22.2M to $120.5M, due to updated cost estimate for the vehicles procurement. Unallocated Contingency has remained the same over the last four months.



Project Schedule

The baseline schedule for the Northgate Link Extension establishes a Revenue Service date of September 2021. The completion date of the project is April 10, 2021, 168 days earlier than the target revenue service date. The dates shown include the effects of Sound Transit-controlled float at critical interface points.

Due to GC/CM methodology for N140 and N150, Final Design for those two contract packages was put on hold until procurement of the GC/CM contractor was completed. Procurement projected to complete 3rd QTR 2013 at which time Final Design will resume.



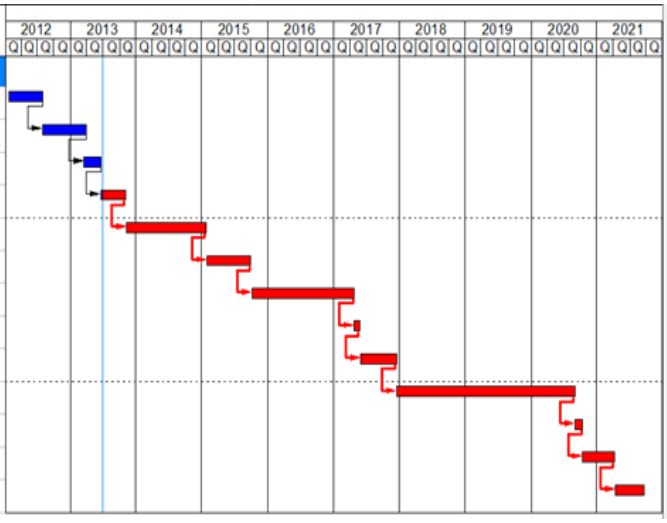
Activity ID	Activity Name	Start	Finish
	Northgate Link Extension Master Summary Schedule	01-Dec-10 A	25-Sep-21
	N110 - Roosevelt Advance Utility Relocation	16-Apr-12 A	31-May-13
N110.01	Roosevelt Advance Utility Relocation Final Design	16-Apr-12 A	26-Sep-12
N110.02	Roosevelt Advance Utility Relocation AD, Bid & Award	19-Sep-12	05-Mar-13 A
N110.03	Roosevelt Advance Utility Relocation Construction Summary	05-Mar-13 A	31-May-13
	N111 - Maple Leaf Portal Advance Utility Relocation	31-May-12	09-Feb-15
N111.01	Maple Leaf Portal Advance Utility Relocation Final Design	31-May-12	26-Nov-13
N111.02	Maple Leaf Portal Advance Utility Relocation AD, Bid &Award	27-Nov-13	15-May-14
N111.03	Maple Leaf Portal Advance Utility Relocation Summary	16-May-14	09-Feb-15
	N112 - U District & Roosevelt Stations Site Prep	17-Jan-11 A	30-Aug-13
N112.01	U District & Roosevelt Station Site Prep Final Design	17-Jan-11 A	22-Nov-11 A
N112.02	U District & Roosevelt Station Site Prep AD, Bid & Award	27-Jan-12 A	26-Jul-12 A
N112.03	U District & Roosevelt Stations Site Prep	26-Jul-12 A	30-Aug-13
	N113 - SCL 115kV Relocation	19-Jun-13 A	28-Mar-16
N113.01	SCL 115kV Relocation Final Design	19-Jun-13 A	19-Jun-14
N113.02	SCL 115kV Relocation AD, Bid &Award	20-Jun-14	13-Feb-15
N113.03	SCL 115kV Relocation Summary	14-Feb-15	28-Mar-16
	N125 - U District & Roosevelt Station Box Ex + University to North	12-Mar-12 A	09-Feb-18
N125.00	Roosevelt & U District Box Excavation & Tunnel Final Design	12-Mar-12 A	10-Dec-12 A
N125.01	Roosevelt & U District Box Excavation and Tunnelling AD, Bid & Av	10-Dec-12 A	27-Sep-13
N125.02	U District & Roosevelt Box Exc + Tunnelling University to Northgate	28-Sep-13	09-Feb-18
	N140 - U District Station Construction	01-Dec-10 A	03-Sep-20
N140.00	Final Design through 60%	01-Dec-10 A	27-Apr-12 A
N140.01	Procure GC/CM	16-Sep-13*	25-Apr-14
N140.02	Finalize Final Design	29-Jul-14	12-Jan-16
N140.03	U District Station Finishes	26-Jan-18	03-Sep-20
	N150 - Roosevelt Station Construction	21-Jun-11 A	05-Aug-19
N150.00	Final Design through 60%	21-Jun-11 A	27-Feb-12 A
N150.01	Procure GC/CM	19-Apr-13 A	06-Sep-13
N150.02	Finalize Final Design	10-Dec-13	12-Aug-15
N150.03	Roosevelt Station Finishes	10-Jan-17	05-Aug-19
	N160 - Northgate Station & Aerial Guideway	27-Jun-11 A	09-Aug-19
N160.00	Northgate Station Final Design	27-Jun-11 A	15-Sep-14
N160.01	Northgate Station AD, Bid & Award	16-Sep-14	08-Mar-16
N160.02	Northgate Station Finishes & Aerial Guideway	09-Mar-16	09-Aug-19
	N180 - Trackwork University to Northgate	15-Feb-12 A	18-Jun-19
N180.00	Trackwork Final Design	15-Feb-12 A	09-Aug-13
N180.01	AD, Bid & Award Trackwork Contract	01-Apr-14	20-Apr-15
N180.02	Floating Slab & Trackwork University Sataion to Northgate Station	27-May-17	18-Jun-19
	N830 - Systems Installation & Integration	31-Jan-11 A	15-Oct-20
N830.01	Systems Final Design	31-Jan-11 A	31-Dec-15
N830.02	GC/CM Procurement	29-Apr-16	20-Feb-17
N830.03	Systems Installation	21-Feb-17	15-Oct-20
	Testing & Startup	16-Oct-20	25-Sep-21
N900.00	Testing & Commissioning	16-Oct-20	10-Apr-21
N900.01	Project-Wide Float	11-Apr-21	25-Sep-21
N900.02	Project Complete		25-Sep-21

Critical Path Analysis

The critical path (see graphic below) for the Northgate Link Extension began with the prep work for the Roosevelt and U District Station sites. As the stations' site preparation winds down, the next critical path is excavation for these underground stations. As soon as the Roosevelt Station excavation is complete, two tunnel boring machines (TBMs) will begin boring the parallel north and southbound tunnels from Roosevelt, south to the University Station. N125 (TBM Tunnels) contract is about to be awarded to the low bidder .

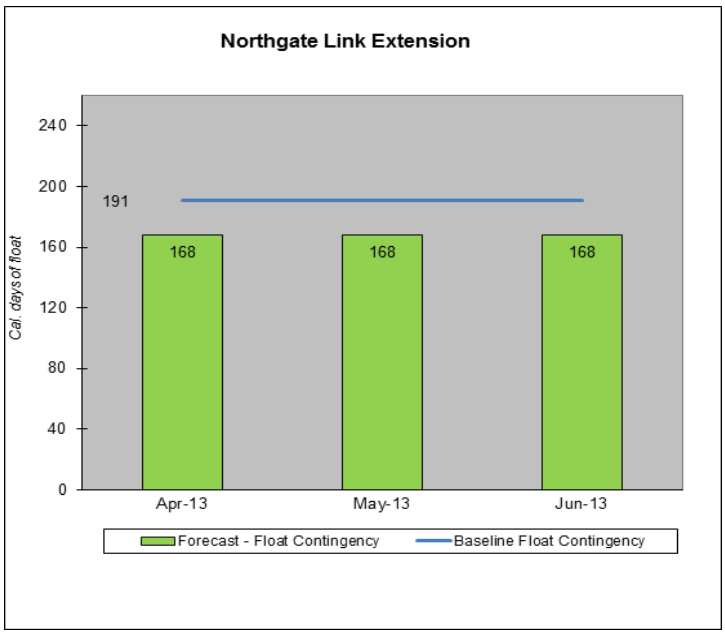
When the tunnels between U District and University Stations are complete, N180 (Floating Slab & Trackwork) will install floating slabs in the portion of the tunnels underlying the University campus and install the trackwork for the light rail vehicles between University and Roosevelt Stations. As soon as the floating slab work is completed, N140 will begin constructing the U District Station. As quickly as the special systems rooms in U District Station become available, N830 Systems will begin to integrate with power and communications and controls project wide. A parallel critical path includes the light rail trackwork and Systems contractor installation of power and control for the light rail vehicles. Following systems installation will be testing, commissioning and startup leading up to approval for revenue service.

Activity Name	Start	Finish
Northgate Link Extension - Summary Construction Critical Path	27-Jan-12 A	24-Sep-21
N112 Contractor Procurement	27-Jan-12 A	31-Jul-12 A
N112 Roosevelt Station Demo & Site Prep	01-Aug-12 A	29-Mar-13 A
N110 Roosevelt Site Advanced Utility Relocation	18-Mar-13 A	17-Jun-13 A
Ownwe Controlled Float	18-Jun-13 A	05-Nov-13
N125 Roosevelt Station Box Excavation	06-Nov-13	27-Jan-15
N125 Tunneling Roosevelt Station to U District Station	28-Jan-15	02-Oct-15
Tunnel Cross-Passages, Mech, Elec, Civil	05-Oct-15	26-Apr-17
N125 - N830 Interface Float	27-Apr-17	26-May-17
N180 U District Floating Slab	30-May-17	18-Dec-17
N140 U District Station Civil, Structural & Finishes	19-Dec-17	03-Sep-20
N830 Mechanical & Electrical Systems Installation	04-Sep-20	15-Oct-20
System-Wide Testing and Startup	16-Oct-20	09-Apr-21
Revenue Service Window/Project Float	12-Apr-21	24-Sep-21



The graphic to the right illustrates the project-wide total float. There are 191 days of float in the baseline schedule.

The float calculated for the last three months is 168 days. The drop in the float in April 2013 is the result of changing the expected Notice to Proceed date for Contract N125 from September 6, 2013 to September 27, 2013.



Right of Way

The U District and Roosevelt stations require the acquisition of a range of property interests including fee takings for stations and staging areas; tunnel easements are required for the running tunnel. These acquisitions will result in owner and tenant, residential and commercial relocations. In addition, property acquisition for the Roosevelt Station location involved the advanced acquisition of three parcels that the Sound Transit Board approved in June and October 2006.

Line Section	Total Parcels Certified	Offers Made	Signed Agree-ments	Admin. Settle-ments	Posses-sion and Use	Closings to date	Baseline Relocations Required	Relocations Completed
U District Station	16	15	1	0	5	8	3	1
Roosevelt Station	20	19	0	0	0	19	26	26
Tunnel Easements	190	189	2	0	6	161	0	0
Maple Leaf Portal	7	4	1	0	0	0	0	0
Total	**233**	**227**	**4**	**0**	**11**	**188**	**29**	**27**

Roosevelt Station – On July 2011 the Board authorized the acquisition of property rights from an additional 8 parcels adjacent to the Roosevelt Station footprint. One parcel dropped from further consideration, one parcel is in negotiation, one parcel is in condemnation, two parcels are in negotiation, and five parcels have closed. Of the 20 total parcels for Roosevelt Station, 19 have closed.

U District Station – The UW Exchange parcels closed on May 30, 2013.

Northgate Link Tunnel Easements – On February 28, 2013, the Sound Transit Board authorized the acquisition of two temporary construction easements at Northgate Station. No offer is currently needed for either parcel.

Quality Assurance Activities

Activities

- Attended Work Plan Meeting for N160 90% Design Milestone submittal.

Issues

- None to report.

Summary

Description	June 2013	Notes
No. of Audits Planned	0	None
No. of Audits Completed	2	N180 Trackwork 90% Design, N160 60% Design
Reports in Progress	0	None
No. of Audits Postponed	0	None

Environmental

- Working with design team to refine wetland impacts and mitigation opportunities..

Community Outreach

- Sent monthly e-newsletter to approximately 3,100 subscribers.
- Continued preparation on access awareness map for the Roosevelt neighborhood.
- Met with UW Tower Facilities, UW Police Dept and UW Emergency Management to discuss communication during N125 construction.

Business Mitigation

- Met with Roosevelt business representative to discuss construction impacts and the business mitigation program.
- Participated in the Roosevelt Neighborhood Association business group meeting.

Sound Transit Board Actions

Board motions and resolutions directly related to Northgate Link are summarized in the table below.

Motion Number	Description	Date
R2013-15	*Acquire, dispose, or lease certain real property interests, including acquisition by condemnation, and pay eligible relocation and re-establishment benefits to affected owners and tenants as necessary for the Northgate Link Extension.*	*Jun 27*

Final Design Overview

Sound Transit has executed two key contracts with professional services consultants for the Final Design of the Northgate Link Extension. Jacobs Associates (JA) is providing civil engineering and architectural final design services and was given NTP in October 2010. LTK Engineering Services (LTK) is providing systems engineering final design services and was given NTP in January 2011.

Final Design Activities

Contract Package N111 *–Advanced Electrical Utility Relocation and Northgate Station Site:*

- Prepared materials for 60% design submittal to Seattle City Light.
- Continued 90% design effort.

Contract Package N113 - *115kV Relocation at Northgate Sta:*

- Site visit carried out by ST and Contract N113 design team members.
- Commenced initial design tasks for overhead line alignment.

Contract Package N140 - *U District Station Civil and Finishes*:

- Design effort on hold (at 60%) pending GC/CM procurement.
- Clarified criteria regarding mechanical design and exhaust shaft extensions, and updated information in U District Station TOD Options memorandum.

Contract Package N150 - *Roosevelt Station Civil and Finishes.*

- Design effort on hold (at 60%) pending GC/CM procurement.

Contract Package N160 - *Northgate Station and Aerial Guideway Civil and Finishes:*

- Commenced with 90% design effort.
- Reached agreement with King County, SDOT and WSDOT on station site, transit way and street channelization configurations and complete design of site and related station elements up to 60% design level based on direction provided by ST.
- Coordinated new station roof area and irrigation demand for cistern sizing with Rain Water Harvesting vendor.
- Provided input on outstanding issues pertaining to KCM layover area and SPG wall and vault proximity.
- Continued coordination and integration regarding HVAC layout for elevator machine room.

Contract Package N180 - *Trackwork*

- Started preparation of responses to 90% design package comments.
- Continued 100% design effort.

Contract Package N830 – *Traction Electrification, Signals, and Communications:*

- Revised the OCS design to provide wiring for the MOW track
- Provide switch machine clearance calculations to structures for adjustment for track slab.
- Met with ST, FMS and UW staff to discuss EMI mitigation for UW lab equipment.

Final Design Schedule

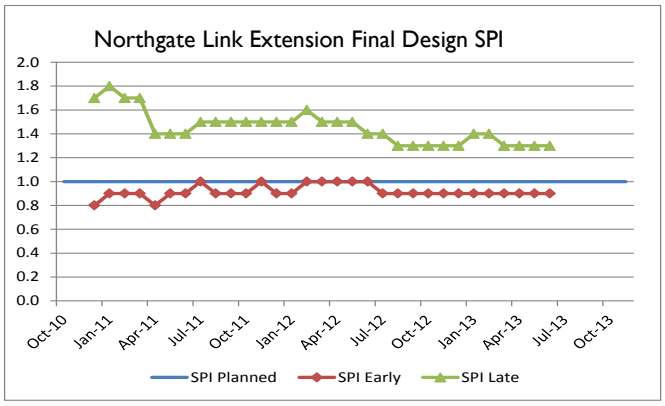
The table below summarizes the current civil Final Design submittal schedule for each contract package.

Work Packages	60%		90%		100% to ST	
	Plan	F/A*	Plan	F/A*	Plan	F/A*
N111 Advanced Utility Relocation – Northgate	12/21/2012	5/23/2013A	3/29/2013	9/26/2013	7/12/2013	11/26/2013
N113 115kV Relocation at Northgate	10/29/2013	10/29/2013	3/27/2014	3/27/2014	6/19/2014	6/19/2014
N140 U District Station Finishes	12/24/2011	4/27/2012A	9/18/2012	1/24/2015	5/10/2013	10/16/2015
N150 Roosevelt Station Finishes	4/13/2012	2/27/2012A	1/28/2013	9/12/2014	10/23/2013	6/5/2015
N160 Northgate Sta. Civil/Finishes/Guideway	6/27/2012	10/5/2012A	4/17/2013	2/22/2014	11/26/2013	9/6/2014
N180 Trackwork	8/23/2012	8/23/2012A	5/22/2013	4/8/2013A	8/26/2013	9/30/2013
N830 Traction Electrification, Signals, Communications	12/12/2012	12/20/2012A	4/10/2014	2/20/2015	12/9/2014	11/4/2015

F/A* = Forecast/Actual

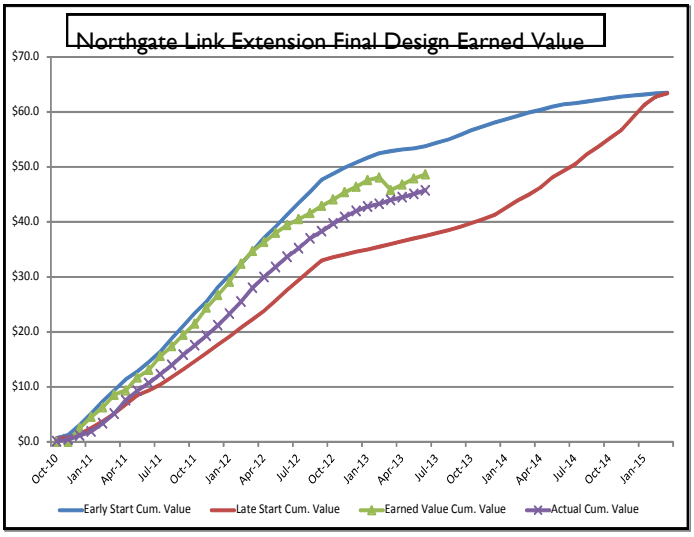
Final Design Schedule Performance

For Final Design activities only, the Schedule Performance Index (SPI) reported this period is 0.9 based on the early start dates. The design consultant is meeting all of their design deliverable milestones. Additionally, the late start SPI is 1.3 indicating that the design activities are meeting critical path dates.



Final Design Cost Performance

JA has submitted 33 progress payments to date in the total amount of $46.4M, which is approximately 56% of the total contract amount. The percent spent for Final Design activities only is 72%, with a reported percent complete of approximately 77%, resulting in an earned value of $48.7M. The cumulative Cost Performance Index (CPI) is currently 1.1, which means the expenditures are at or lower than the earned value. If the current trend continues, final cost would be within or under budget.



Performance	Previous Period	Current Period	Cumulative To Date
Amount Invoiced	$45,149,779	$598,804	$45,748,583
% Spent	71.1%	0.9%	72.0%
Earned Value	$47,931,949	$721,799	$48,653,748
% Complete	75.5%	1.1%	76.6%
CPI	**1.1**	**1.2**	**1.1**

Other Key Final Design Activities

Geotechnical Investigation

- Completed preparation of three remaining settlement reports.

Surveying & Right-of-Way

- Updated, revised and finalized parcel maps and legal descriptions as requested.
- Coordination of easement and take requirements for Northgate parking garage.

Permits

- Continued development of MUP application for Northgate Station.
- Updated N160 60% ROD Matrix.

Construction Noise Variances

- Responded to comments on MPPCV application for Maple Leaf Portal.

Noise Mitigation for At Grade and Elevated Guideway

- Responded to comments on Noise Mitigation Report for light rail operations north of Maple Leaf Portal.

Ground Borne Noise and Vibration

- Continued to provide input to the floating track slab manufacturing and installation cost.

Construction Cost Estimating

- Submitted construction cost estimate for Contract N111 60% design package.
- Submitted pre-90% construction cost estimate for Contract N160.

Construction Schedules

- Submitted construction schedule for N111 60% design package.

Quality Assurance

- None this period.

Design and Project Integration

- Performed integration and coordination of Contract N160 artist and Systems design. No new ICDs raised for a total of 103; 65 closed, 38 open.

Major Construction Contract Packages

Construction of the Northgate Link Extension consists of eight major construction contract packages: seven civil packages and one combined systems package. Below is a brief scope description for each of these contract packages:

N110 Utility Relocation at Roosevelt Station Area - The contract includes relocation of electrical and communication facilities at the Roosevelt Station site.

N111 Utility Relocation at Maple Leaf Portal and Northgate Station Area– The contract includes the relocation of electrical facilities at the Maple Leaf Portal and Northgate Station Areas.

N113 115kV Relocation at Northgate Station Area - This contract includes the relocation of overhead electrical facilities at the Northgate Station area.

N112 U District and Roosevelt Station Site Preparation - The contract includes the demolition of existing structures, grading and paving at the U District and Roosevelt Station sites.

N125 TBM Tunnels UW Station to Maple Leaf Portal - The contract includes all tunneling work for the project. In addition, this contract provides the support of excavation of station boxes work for the U District and Roosevelt stations.

N140 U District Station Finishes - The contract provides the civil and architectural finishes work for the U District Station.

N150 Roosevelt Station Finishes– The contract provides the civil and architectural finishes work for the Roosevelt Station.

N160 Northgate Station & Elevated Guideway - The contract includes the civil and architectural finishes work for the Maple Leaf Portal, the aerial guideway, and the Northgate Station through Tail Track.

N830 Track Electrification, Signals, Communication System, and Track – The contract includes the installation of the major system elements – Traction Electrification, 26kV Distribution, Signals, and Communications and all Trackwork.

Construction Schedule Highlights

This table shows the currently calculated dates of key milestones for each of the ten Northgate Link Extension contracts.

Package	Bid Advertisement	NTP	Substantial Completion
N110 – Utility Relo at Roosevelt Station	Dec 2012A	Mar 2013A	May 2013A
N111 – Utility Relo at Northgate Area	Nov 2013	May 2014	Feb 2015
N112 – U District & Roosevelt Site Prep	Jan 2012A	Aug 2012 A	Aug 2013
N113 - SCL 115kV Relocate	Jun 2014	Feb 2015	Mar 2016
N125 – TBM Tunnels	Mar 2013A	Sep 2013	Feb 2018
N140 – U District Station Finishes	Sep 2013 (GC/CM Precon)	Jan 2018 (construction)	Sep 2020
N150 – Roosevelt Station Finishes	Apr 2013A (GC/CM Precon)	Jan 2017 (construction)	Aug 2019
N160 – Northgate Station & Guideway	May 2015	Mar 2016	Aug 2019
N180– Floating Slab & Trackwork	Apr 2014	Aug 2015	Jun 2019
N830 – Systems & Track	Apr 2016 (GC/CM Precon)	Feb 2017 (construction)	Oct 2020

A = Actual

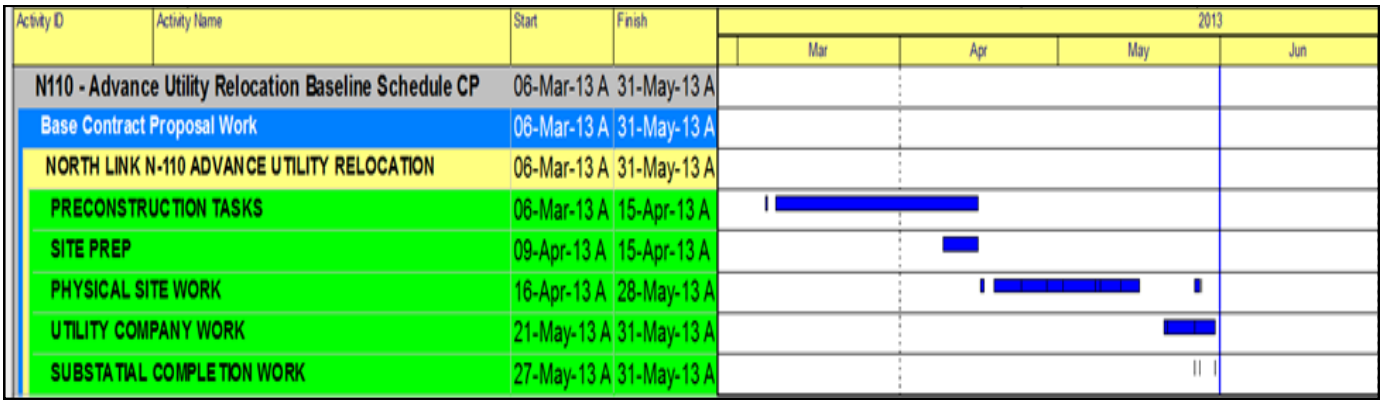
Contract N110 - Advanced Utility Relocation at Roosevelt Station Area

Current Progress

The contractor completed all work at the end of May and was granted Substantial Completion. Seattle City Light also completed their work.

Schedule / Critical Path

Work was completed on schedule.


Activity ID
Activity Name
Start
Finish
2013
Mar
Apr
May
Jun
N110 - Advance Utility Relocation Baseline Schedule CP 06-Mar-13 A 31-May-13 A
Base Contract Proposal Work 06-Mar-13 A 31-May-13 A
NORTH LINK N-110 ADVANCE UTILITY RELOCATION 06-Mar-13 A 31-May-13 A
PRECONSTRUCTION TASKS 06-Mar-13 A 15-Apr-13 A
SITE PREP 09-Apr-13 A 15-Apr-13 A
PHYSICAL SITE WORK 16-Apr-13 A 28-May-13 A
UTILITY COMPANY WORK 21-May-13 A 31-May-13 A
SUBSTATIAL COMPLETION WORK 27-May-13 A 31-May-13 A

Cost Summary

Present Financial Status	Amount
N110 Contractor	
Original Contract Value	$ 404,324.00
Change Order Value*	$ -
Current Contract Value	$ -
Total Actual Cost (Amount Billed)	$ 3,86,396.75
% of Authorized Billed to-date	96%
Physical Percent Complete:	100%
Authorized Contingency	$ 40,433.00
Contingency Drawdown	$-
Contingency Index	N/A

**A change order in the amount of ($17,927) for unused provisional sum work is in progress.*

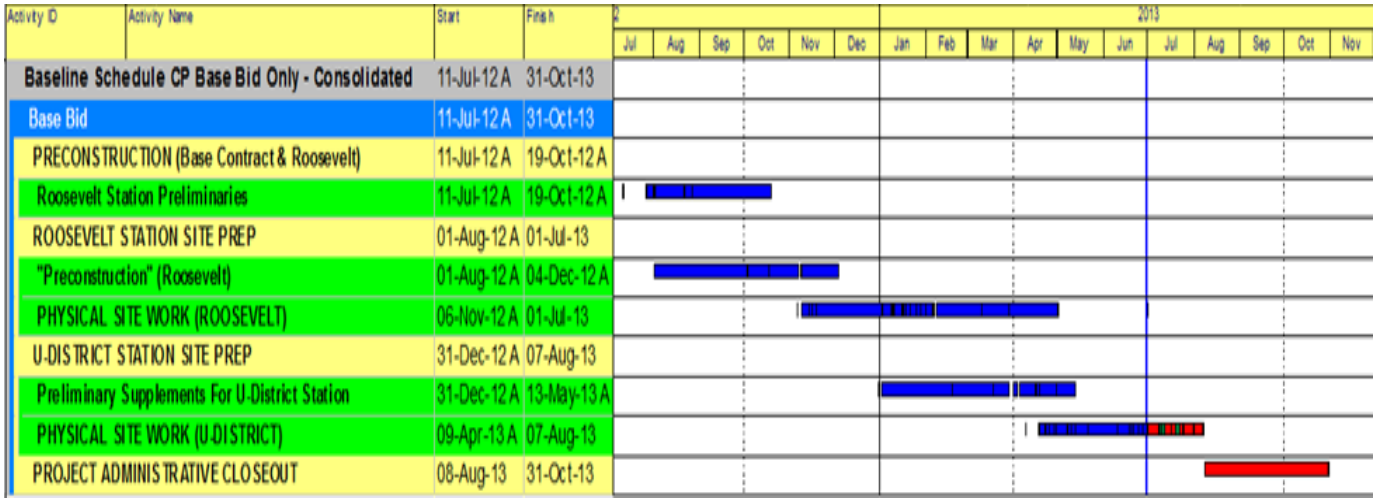
Contract N112 - U District and Roosevelt Station Site Preparations

Current Progress

N112 Contractor obtained full access to the Building A, property owned by UW. Activities included above grade demolition of Fletch House, Chase Bank and parking structure and Building A, including debris removal.

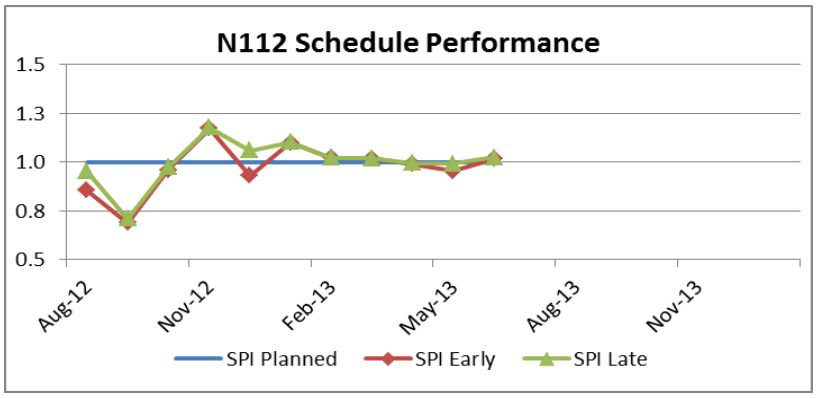
Schedule /Critical Path

With all of the recent progress, the remaining work is essentially the completion of demolition of the few remaining above grade foundations, completion of backfill, stormwater infrastructure, contour grading, and paving the site. The Contractor is planning to accomplish most of this remaining work next period and complete physical work in August.


Activity ID
Activity Name
Start
Finish
2012
2013
Jul Aug Sep Oct Nov Dec Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov
Baseline Schedule CP Base Bid Only - Consolidated 11-Jul-12 A 31-Oct-13
Base Bid 11-Jul-12 A 31-Oct-13
PRECONSTRUCTION (Base Contract & Roosevelt) 11-Jul-12 A 19-Oct-12 A
Roosevelt Station Preliminaries 11-Jul-12 A 19-Oct-12 A
ROOSEVELT STATION SITE PREP 01-Aug-12 A 01-Jul-13
"Preconstruction" (Roosevelt) 01-Aug-12 A 04-Dec-12 A
PHYSICAL SITE WORK (ROOSEVELT) 06-Nov-12 A 01-Jul-13
U-DISTRICT STATION SITE PREP 31-Dec-12 A 07-Aug-13
Preliminary Supplements For U-District Station 31-Dec-12 A 13-May-13 A
PHYSICAL SITE WORK (U-DISTRICT) 09-Apr-13 A 07-Aug-13
PROJECT ADMINISTRATIVE CLOSEOUT 08-Aug-13 31-Oct-13

Schedule Performance Index

The N112 Schedule Performance Index (SPI) is at 1.0, indicating performance is proceeding in accordance with plan.



Key Activities

Current Period

- Began demolition of Chase Bank foundation and vault.
- Completed utility disconnects and hazmat abatement of Building A and began demolition.
- Began site prep of the block between 43rd and the Neptune Theater.

Next Period

- Complete asphalt Paving.
- Complete demolition of Building A.
- Drilling and sampling of contaminated soils in Chase Bank area.
- Install storm infrastructure.
- Remove flashing from the Neptune wall.

Closely Monitored Issues

- Unforeseen contaminated soils were discovered beneath the buried foundation of the Chase Bank drive through teller's window. The extent of the contaminated soil is unknown and a planned testing program will be done to sample the soil. Drilling and testing will be conducted next month.

Cost Summary

Present Financial Status	Amount
N112 Contractor - Titan Earthwork	
Original Contract Value	$ 4,444,444.44
Change Order Value	$ 16,678.79
Current Contract Value	$ 4,461,123.33
Total Actual Cost (Amount Billed)	$ 3,560,546.83
% of Authorized Billed to-date	80%
Physical Percent Complete:	90%
Authorized Contingency	$ 444,444.56
Contingency Drawdown	$ 16,678.79
Contingency Index	3.97

Site grading is ongoing.

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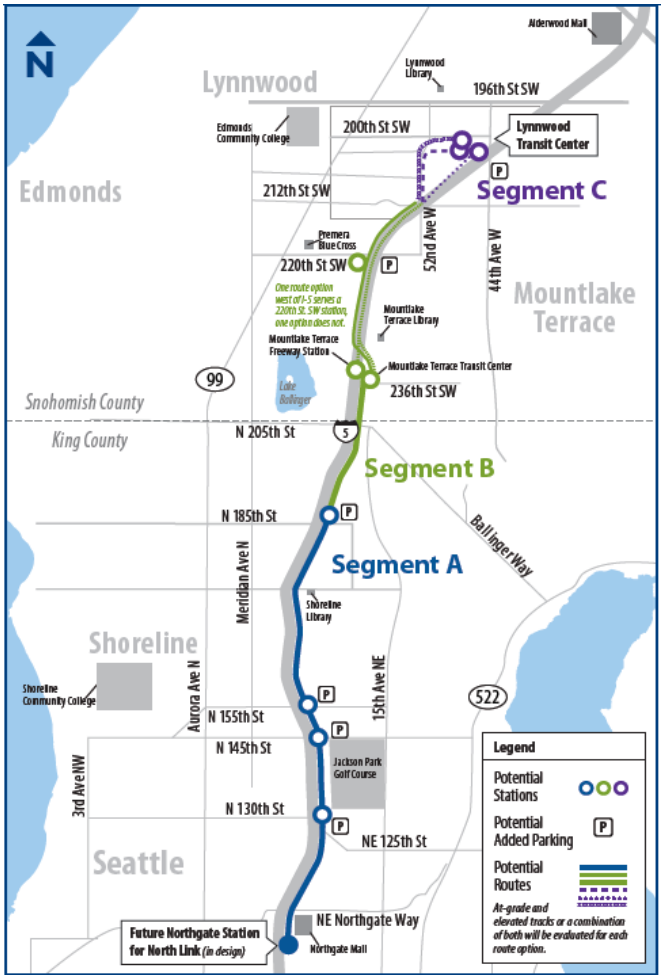
Link Light Rail
Lynnwood Link Extension

Scope

The Lynnwood Link Extension entails planning, permitting, design, and construction of an extension of light rail from Northgate to Lynnwood in Snohomish County with service in the cities of Shoreline and Mountlake Terrace. Consistent with FTA New Starts requirements, the project has undergone an alternative analysis, completed in the 3rd QTR 2011, and Environmental Scoping, completed in the 4th Quarter 2011. The development of the draft environmental impact statement (DEIS) and conceptual engineering of the DEIS alternatives started in January 2012. The Sound Transit Board identified the route and station alternatives to study in the DEIS in April 2012.

Key Project Activities/Issues

- Publishing DEIS in July 2013 with a 90-day comment period.
- Conducting outreach activities this summer centered around the DEIS.
- Anticipate Sound Transit Board decision of preferred alternative in 4th QTR 2013.



Map of Lynnwood Link Extension route and station alternatives.

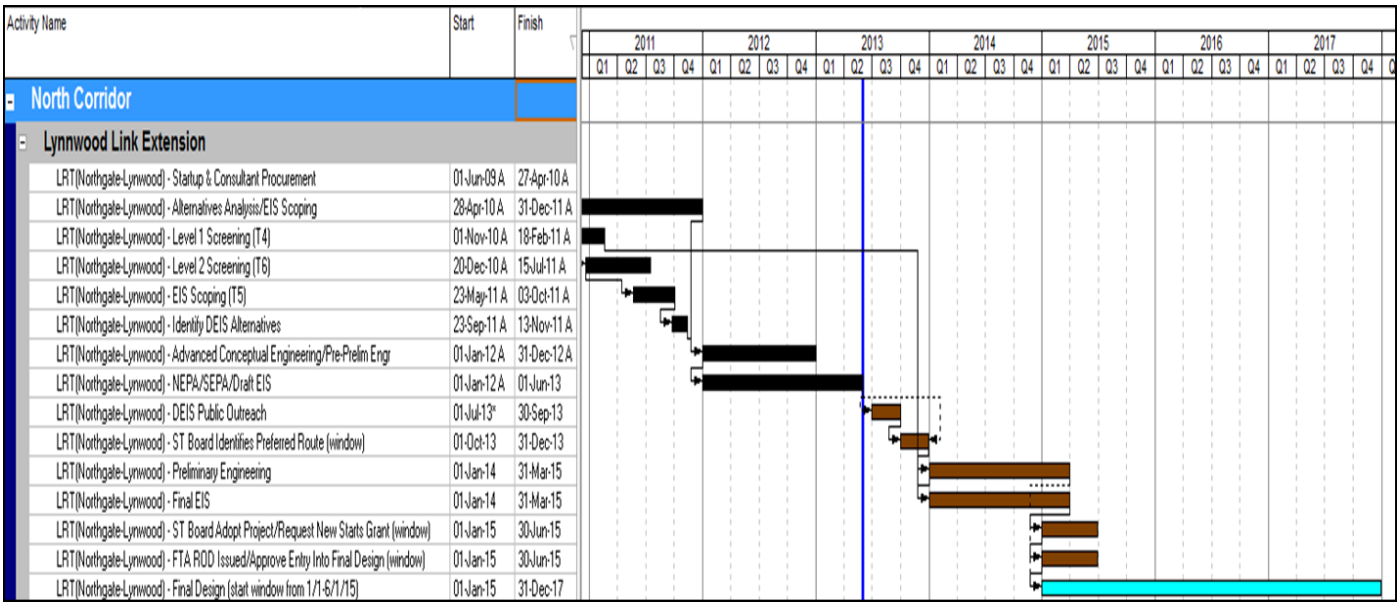
Project Cost Summary

The Lynnwood Link Extension is currently funded through the completion of preliminary engineering (PE) and environmental documentation. Board approval for additional funding for final design and construction will be sought upon completion of PE. Table (below) figures in millions.

Phase	Adopted Budget	Commitment to Date	Incurred to Date	Forecasts and Trends	Estimated Final Cost (EFC)	Budget Versus EFC
Administration	$10.7	$2.6	$2.8	$8.2	$10.8	($0.0)
Preliminary Engineering	$44.3	$19.1	$14.6	$25.2	$44.3	$0.0
3rd Party Agreements	$1.0	$0.3	$0.1	$0.7	$1.0	$0.0
Right of Way	$1.1	$0.1	$0.0	$1.0	$1.1	$0.0
Total	**$57.1**	**$22.0**	**$17.5**	**$35.1**	**$57.2**	**($0.0)**

Project Schedule

The Lynnwood Link Extension, environmental documentation and preliminary engineering is anticipated to be completed in 2015. The project schedule is presented below.


Activity Name
Start
Finish
2011
2012
2013
2014
2015
2016
2017
Q1 Q2 Q3 Q4
North Corridor
Lynnwood Link Extension
LRT(Northgate-Lynnwood) - Startup & Consultant Procurement 01-Jun-09 A 27-Apr-10 A
LRT(Northgate-Lynnwood) - Alternatives Analysis/EIS Scoping 28-Apr-10 A 31-Dec-11 A
LRT(Northgate-Lynnwood) - Level 1 Screening (T4) 01-Nov-10 A 18-Feb-11 A
LRT(Northgate-Lynnwood) - Level 2 Screening (T6) 20-Dec-10 A 15-Jul-11 A
LRT(Northgate-Lynnwood) - EIS Scoping (T5) 23-May-11 A 03-Oct-11 A
LRT(Northgate-Lynnwood) - Identify DEIS Alternatives 23-Sep-11 A 13-Nov-11 A
LRT(Northgate-Lynnwood) - Advanced Conceptual Engineering/Pre-Prelim Engr 01-Jan-12 A 31-Dec-12 A
LRT(Northgate-Lynnwood) - NEPA/SEPA/Draft EIS 01-Jan-12 A 01-Jun-13
LRT(Northgate-Lynnwood) - DEIS Public Outreach 01-Jul-13* 30-Sep-13
LRT(Northgate-Lynnwood) - ST Board Identifies Preferred Route (window) 01-Oct-13 31-Dec-13
LRT(Northgate-Lynnwood) - Preliminary Engineering 01-Jan-14 31-Mar-15
LRT(Northgate-Lynnwood) - Final EIS 01-Jan-14 31-Mar-15
LRT(Northgate-Lynnwood) - ST Board Adopt Project/Request New Starts Grant (window) 01-Jan-15 30-Jun-15
LRT(Northgate-Lynnwood) - FTA ROD Issued/Approve Entry Into Final Design (window) 01-Jan-15 30-Jun-15
LRT(Northgate-Lynnwood) - Final Design (start window from 1/1-6/1/15) 01-Jan-15 31-Dec-17

Sound Transit Board Actions

Motion Number	Description	Date
	None to report.	

Environmental

- Publishing the Draft EIS in July 2013.

Community Outreach

- Provided project briefings to leaders of Shoreline Council Neighborhood Groups and to neighborhood representatives in the North District Council of Seattle.
- Mailed out letters to over 250 potentially impacted property owners. Began receiving calls and scheduling individual meetings with property owners which will include the project manager of the segment and representatives from Community Outreach and Real Estate.
- Attended City of Lynnwood public meetings on the OMSF and Lynnwood Link Extension.
- Continued planning and preparation for the DEIS open house and public hearings.

Phase 2 - Conceptual Engineering and DEIS Overview

Sound Transit executed a professional services agreement with North Corridor Transit Partners (NCTP) for civil engineering and architectural design services in April 2010. Sound Transit issued NTP for Phase 2, Conceptual Engineering and DEIS for the Lynnwood Link Extension in January 2012.

Key Phase 2 Activities

- Preparing to publish draft EIS.
- Continued advanced conceptual design, including discussions with WSDOT, FHWA, and FTA regarding light rail facilities in the I-5 right-of-way.
- Continued development of selected advanced design work, planning, and analysis.
- Completed risk assessment and working on advanced conceptual design estimates.
- Conducting property owner outreach, open houses, and public meetings this summer.

Phase 2 Schedule Performance

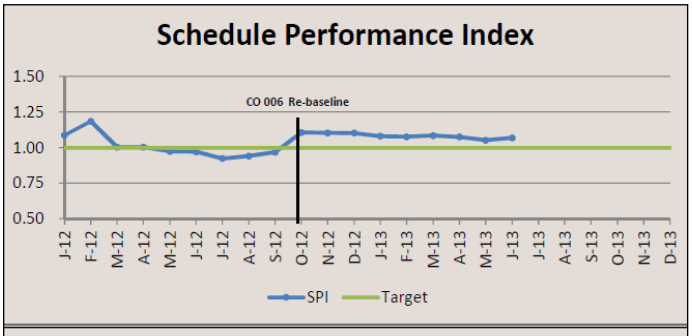
Change Order 006 was executed in October 2012, addressing changes to the FTA's New Starts approval process. This change order reduced the Phase 2 schedule and re-scoped deliverables, triggering a revision to the performance management baseline.

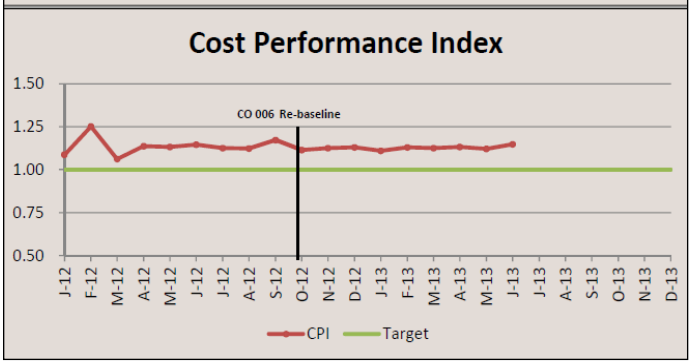
The Schedule Performance Index (SPI) trends at 1.07 through June against the revised baseline. All Phase 2 design deliverable milestones have been met. The current schedule indicates completion of Phase 2 work in November 2013.

Phase 2 Cost Performance

$14.0 M of the total contract amount, approximately 78%, has been spent through June. Phase 2 invoices through June total $9.3M, approximately 70% of the phase 2 contract amount. The Phase 2 percent complete reported at the end of June is 80%, resulting in an earned value of $10.7M.

The cumulative Cost Performance Index (CPI) is 1.15, which means that the expenditures are lower than the earned value. Based on the current trend, final cost is expected to be within or under budget.





Phase 2 Performance	Previous Period	Current Period	Cumulative To-date
Amount Invoiced	$8,211,748	$1,063,566	$9,275,314
% Spent	62%	8%	70%
Earned Value	$9,253,543	$1,410,069	$10,663,612
% Complete	70%	10%	80%
SPI	**1.09**	**0.97**	**1.07**
CPI	**1.13**	**1.33**	**1.15**

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Scope

East Link extends light rail to East King County via I-90 from Downtown Seattle to Downtown Bellevue and the Overlake area of Redmond, with stations serving Rainier Avenue/I-90, Mercer Island, South Bellevue, Downtown Bellevue, Overlake Hospital, the Bel-Red corridor, Overlake Village and the Overlake Transit Center (OTC). Environmental review for a future expansion between the Overlake Transit Center and Downtown Redmond has also been completed. Preliminary engineering has been completed; the project is in Final Design. Revenue Service to the Overlake Transit Center is forecast for 2023.

Map of East Link Extension.

Key Project Activities/Issues

I-90

- *Contract Packaging*: Continue refinements to the contract packaging and delivery methods (ongoing).
- *Stations*: Rainier Ave west entrance option (bridge removal) being developed to 30%, east entrance design developing to 60%, Mercer Island Station advancing to 60%.
- *Track Bridge:* Installation of prototype track underway at Colorado test facility.
- *Track Attachment*: Advancing memos to WSDOT for two plinth system options.
- *Seismic Retrofits for Fixed Spans*: Workshop held June 5th; West Approach Structure level 2 Work plan submitted and discussed with WSDOT.
- *Floating Bridge*: Basis of Evaluation submitted to WSDOT; Wind and Wave Analysis begun.
- *Fire/Life/Safety - Tunnels:* Meeting held with WSDOT to discuss options, including power sharing and re-use of fans.
- *IDS Turnback Track*: Preparation of change orders to include final design and construction contract package in East Link Segment (for Board consideration in August).
- *Alignment*: Finalizing alignment memo, including updates to alignment/profile and limits for packages.

Bellevue-Redmond

- *Bellevue City Council*: Approved final amendments to the MOU and Transit Way Agreements.
- Ongoing Bellevue (DAVE) and Redmond (PREP) scope concurrence processes.
- *Ongoing meetings with City of Bellevue*: Goff Creek sewer crossing, Surrey Downs signal house, City Hall parking garage, Bellefield Pump Station, 120th/124th/130th Station interface, etc.
- *Ongoing meetings with City of Redmond*: Draft agreement development, geotechnical explorations at the Overlake Village Station, PS Business Park, right of entry requests, etc.
- Began review of draft JARPA application for the East Link Extension.
- Ongoing work to identify at-grade segment and alignment issues.
- Continued updating Cost Pressure matrix.
- Continued review of Microsoft's proposed plan for relocating the existing SONNET line and negotiation of the OTC agreement.
- Meeting with Carriage Hills Condo Board President and their attorney to review the acquisition of the complex.
- Meeting with Wright Runstad regarding the Spring District.

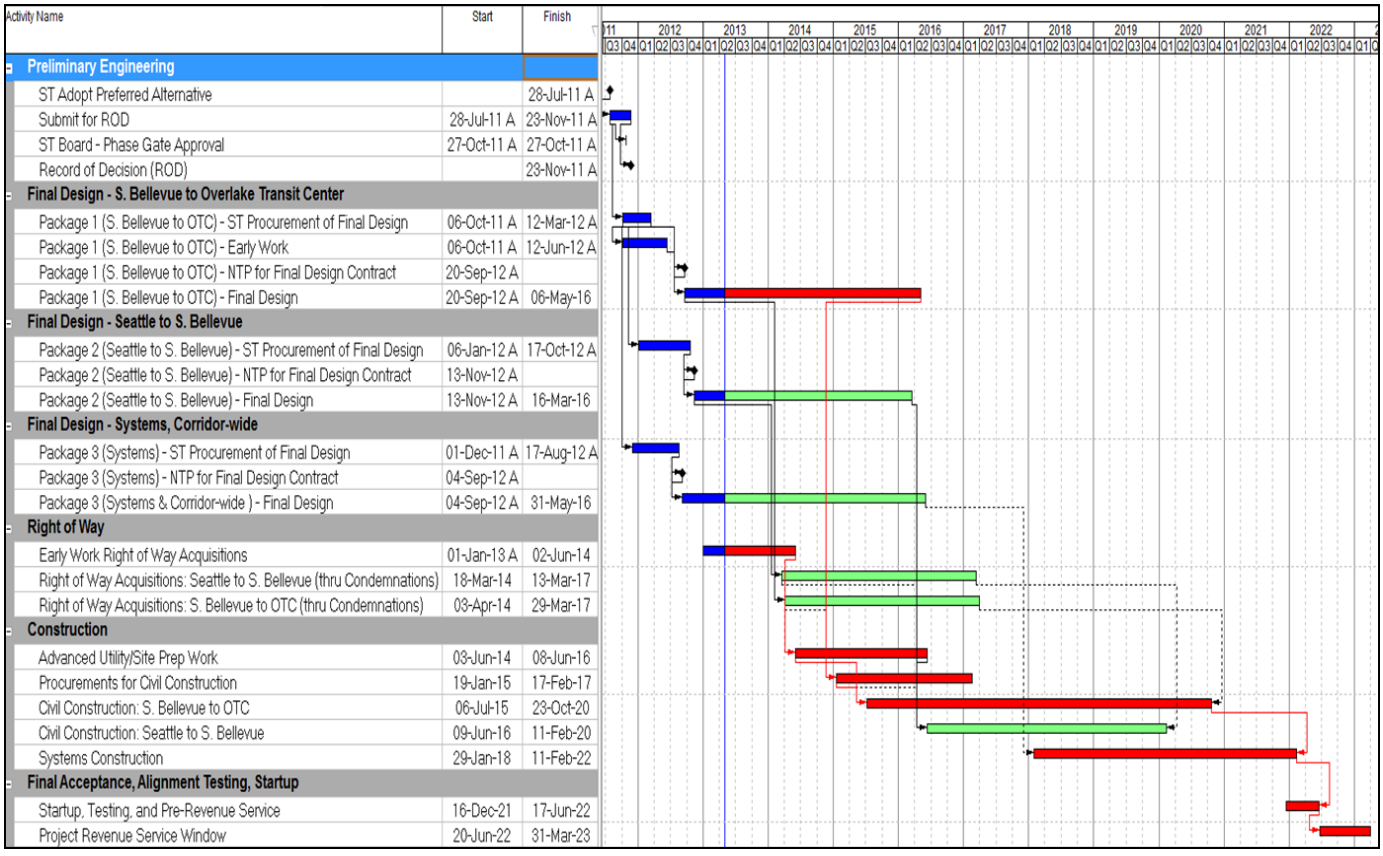
Project Cost Summary

The following table summarizes the cost information for the East Link Extension. Lifetime Budget reflects the project budget adopted by Sound Transit Board, which includes budget through the Final Design Phase. (Figures in millions.)

	Lifetime Budget	Commit-ment to Date	Incurred to Date	Forecasts and Trends	Estimated Final Cost (EFC)	Budget vs. EFC
Administration	$66.5	$17.1	$18.2	$49.5	$66.5	$0.0
Preliminary Engineering	$61.1	$54.4	$53.3	$6.8	$61.1	$0.0
Final Design	$223.7	$144.2	$39.2	$79.5	$223.7	$0.0
3rd Party Agreements	$40.1	$3.9	$1.7	$36.2	$40.1	$0.0
Right-of-way	$365.4	$15.8	$15.2	$349.6	$365.4	$0.0
Total	**$756.8**	**$235.3**	**$127.6**	**$521.5**	**$756.8**	**$0.0**

Project Schedule

The East Link Extension is in Final Design. Revenue Service to the Overlake Transit Center is forecast for 2023. The Final Design for S. Bellevue to Overlake Transit Center NTP was given on September 20, 2012. The Final Design for Corridor-wide Systems NTP was given on September 4, 2012. The Final Design for Seattle to South Bellevue (I-90) NTP was given on November 13, 2012.



Activity Name	Start	Finish
Preliminary Engineering		
ST Adopt Preferred Alternative		28-Jul-11 A
Submit for ROD	28-Jul-11 A	23-Nov-11 A
ST Board - Phase Gate Approval	27-Oct-11 A	27-Oct-11 A
Record of Decision (ROD)		23-Nov-11 A
Final Design - S. Bellevue to Overlake Transit Center		
Package 1 (S. Bellevue to OTC) - ST Procurement of Final Design	06-Oct-11 A	12-Mar-12 A
Package 1 (S. Bellevue to OTC) - Early Work	06-Oct-11 A	12-Jun-12 A
Package 1 (S. Bellevue to OTC) - NTP for Final Design Contract	20-Sep-12 A	
Package 1 (S. Bellevue to OTC) - Final Design	20-Sep-12 A	06-May-16
Final Design - Seattle to S. Bellevue		
Package 2 (Seattle to S. Bellevue) - ST Procurement of Final Design	06-Jan-12 A	17-Oct-12 A
Package 2 (Seattle to S. Bellevue) - NTP for Final Design Contract	13-Nov-12 A	
Package 2 (Seattle to S. Bellevue) - Final Design	13-Nov-12 A	16-Mar-16
Final Design - Systems, Corridor-wide		
Package 3 (Systems) - ST Procurement of Final Design	01-Dec-11 A	17-Aug-12 A
Package 3 (Systems) - NTP for Final Design Contract	04-Sep-12 A	
Package 3 (Systems & Corridor-wide) - Final Design	04-Sep-12 A	31-May-16
Right of Way		
Early Work Right of Way Acquisitions	01-Jan-13 A	02-Jun-14
Right of Way Acquisitions: Seattle to S. Bellevue (thru Condemnations)	18-Mar-14	13-Mar-17
Right of Way Acquisitions: S. Bellevue to OTC (thru Condemnations)	03-Apr-14	29-Mar-17
Construction		
Advanced Utility/Site Prep Work	03-Jun-14	08-Jun-16
Procurements for Civil Construction	19-Jan-15	17-Feb-17
Civil Construction: S. Bellevue to OTC	06-Jul-15	23-Oct-20
Civil Construction: Seattle to S. Bellevue	09-Jun-16	11-Feb-20
Systems Construction	29-Jan-18	11-Feb-22
Final Acceptance, Alignment Testing, Startup		
Startup, Testing, and Pre-Revenue Service	16-Dec-21	17-Jun-22
Project Revenue Service Window	20-Jun-22	31-Mar-23

Quality Assurance Activities

Activities

- Participated in the East Link Quality Control Training Module B.

Issues

- None to report.

Summary

Description	June 2013	Notes
No. of Audits Planned	1	E340 60% Design Submittal
No. of Audits Completed	0	None
Reports in Progress	0	None
No. of Audits Postponed	0	None

Environmental

- Issued SEPA Addendum to address potential refinements in Bellevue, including updated information in Redmond. In Bellevue, the refinements are the result of the Cost Savings effort. In Redmond, they are due to potential SR 520 pedestrian bridges and noise analysis updates.

Sound Transit Board Actions

Motion Number	Description	Date
R2013-14	*Acquire, dispose, or lease certain real property interests, including acquisition by condemnation, and pay eligible relocation and re-establishment benefits to affected owners and tenants as necessary for the East Link Extension.*	*Jun 27*

Community Outreach

- Hosted South Bellevue Segment Final Design Open House with approximately 110 attendees.
- Hosted Mercer Island Final Design Open House with approximately 85 attendees.
- Notified City of Bellevue affected property owners about upcoming survey, geotech, tree survey, and wetland delineation.
- Worked with Seattle Parks Dept. and Mercer Island residents to coordinate and completed noise monitoring.
- Continued collecting emails and coordinating outreach to residents of Bellefield Residential Park in response to Bellevue City Council action regarding the SE 15th Access Option.
- Working with Real Property to coordinate an owner/tenant informational strategy for early residential acquisitions.
- Finalized downtown Bellevue public involvement summary.
- Distributed E-newsletter to project listserv (audience: 5,500) with a link to the completed downtown Bellevue Public Involvement Summary. The newsletter also included an announcement about our participation in Eastside fairs and festivals this summer and some information about the "what's your story" promotion launched by Communications.
- Held various briefings, meetings and presentations to residents and property owners/representatives.

Final Design Scope

Final Design for the East Link Extension is delivered by three major design contracts: two for civil improvements and one for systems improvements. This civil contract is for the design services from South Bellevue to the Overlake Transit Center (OTC). The contract was awarded to H-J-H Final Design Partners, a joint venture of HNTB Corporation, Jacobs Engineering Group, Inc., and Hatch Mott MacDonald.

The scope of services include detail design of the corridor, preparation of comprehensive construction contract documents, permit support, survey, geotech investigations, right-of-way planning, third party coordination, systems coordination, cost estimating, scheduling, sustainability report, bid support and community outreach.

The project in this segment has been grouped into four Contract Packages: (1) E320 South Bellevue: I-90 to Main Street; (2) E330 Downtown Bellevue: Tunnel to BNSF Touchdown; (3) E340 Bel-Red: BNSF Touchdown to SR-520, and (4) E360 SR-520 to OTC.

Map of South Bellevue to the Overlake Transit Center in Redmond.

Final Design Key Activities

- Continued bi-weekly design integration meetings, coordination with Systems design consultant on TPSS and other systems design elements; geotechnical exploration and field surveying; preparing draft specifications sections list and template, production on standard plan drawings and numerous drawings for all contract packages, and working with Bellevue on development of wetland mitigation options.

E320 So. Bellevue

- Continued development of East Main & South Bellevue Stations toward 60%.
- Continued coordination with I-90 (Segment A) and WSDOT (R-8A Stage 3A) project teams regarding South Bellevue I-90 interface point.
- Continued working through design changes on Bellevue Way and 112th SE resulting from decisions on cost savings ideas.
- Continued working through design changes associated with the mitigation plan developed for Mercer Slough Park.

E330 Downtown Bellevue

- Continued coordination efforts related to E320 interface, I-405 Crossing, and Station interfaces.
- Continued development of East Main Station, Bellevue Transit Station and Hospital Station toward 60% including development of the design for the downtown tunnel and development of right-of-way plans.
- Continued coordination with WSDOT and FHWA regarding proposed long span over I-405.
- Continued discussing proposed conceptual design for relocation of Sturtevant Creek with Bellevue.
- H-J-H began developing construction sequencing/ phasing plan for the north portal cut-and-cover section at 110th and NE 6th.

E340 Bel-Red

- Continued on 60% submittal, including development of station design, refining the design of the alignment, development of roadway and driveway access, development of drainage, utilities and structures, and development of right-of-way plans.
- Continued developing the design for the 120th TPSS and signal house site.
- Continued coordination meetings with City of Bellevue project teams for 120th, 124th, and 130th/16th.
- Continued discussions with private/franchise utility companies regarding conflicts and relocations.

E360 SR 520 to OTC

- Continued concurrence process with Redmond, including design concurrence drawings.

Continued reviewing Microsoft's proposed plan and estimate for relocating the existing Synchronous Optical Network line.

- Continued developing design build documents for E360.
- Continued developing work plan, schedule, etc. to establish milestones and WSDOT/ST interface points, etc. needed for Design-Build (DB) procurement/project delivery.

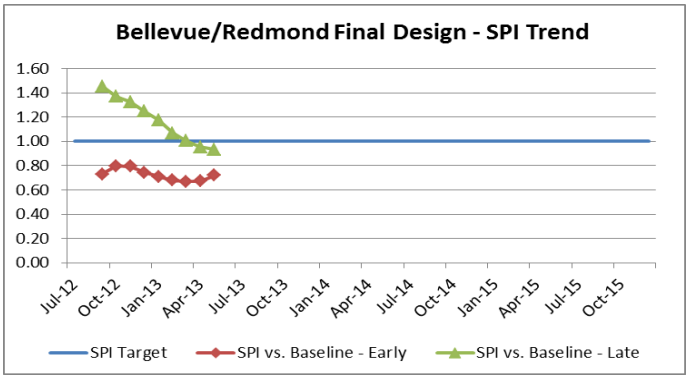
Final Design Schedule

Since last period, there have been small improvements to the E340 60% submittal date. In April 2013, Sound Transit Board did not adopt the cost savings idea along Bellevue Way SE, which is causing redesign work for a portion of E320. Schedule impact is being analyzed. Schedule is showing a large slippage for this contract due to no design is being progress, because the contract is being converted to a design-build procurement. Other design packages are forecast to complete as planned.

Contract Packages	60% Submittal		90% Submittal		100% Submittal		IFB Submittal	
	Baseline	Forecast/ Actual	Baseline	Forecast/ Actual	Baseline	Forecast/ Actual	Baseline	Forecast/ Actual
E320 So. Bellevue: I-90 to Main St.	9/30/2013	9/30/2013	7/2/2014	7/2/2014	11/18/2014	11/18/2014	2/27/2015	2/27/2015
E330 Downtown Bellevue: Tunnel to BNSF Touchdown	8/21/2013	8/22/2013	5/27/2014	5/27/2014	10/8/2014	10/8/2014	1/15/2015	1/15/2014
E340 Bel-Red: BNSF Touchdown to SR-520	7/15/2013	7/17/2013	4/16/2014	4/16/2014	9/3/2014	9/3/2014	12/15/2014	12/15/2014
E360 SR-520 to Overlake Transit Center	10/9/2013	3/31/2014	6/5/2014	11/20/2014	10/13/2014	4/2/2015	3/4/2015	7/272015

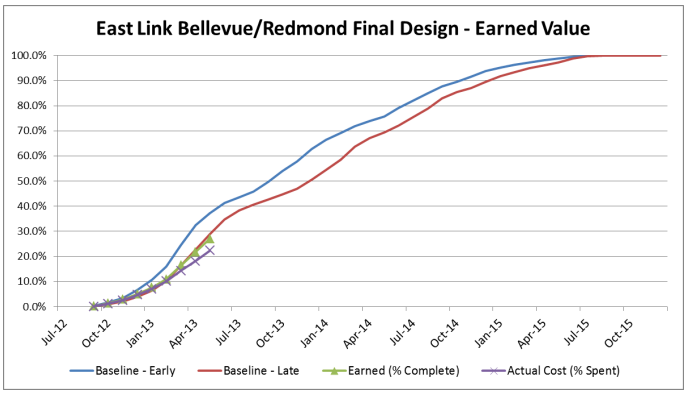
Final Design Schedule Performance

Excluding Other Direct Expenses (ODC's), Profits and DSDC, the Schedule Performance Index (SPI) reported this period is 0.67 when measuring against the Early Schedule Baseline, and 0.95 when measuring against the Late Schedule Baseline. Schedule shows some upfront slippage due to delay in obtaining Right-of-Entries to conduct surveys and geotechnical borings, and E360 design schedule is not being progressed.

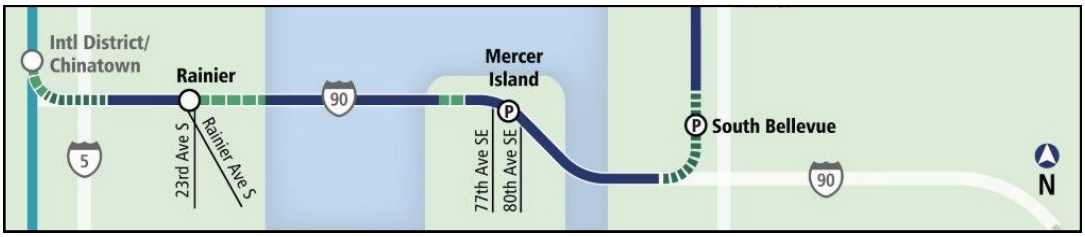


Final Design Cost Performance

Total cost (for Phase 2 Final Design) to-date is $19.1 million, or 23.0% of the contract amount. Progress earned through the same period is approximately 26.4% or $21.9 million of earned value. This yields a cumulative Cost Performance Index (CPI) of 1.1, which indicates better-than-planned cost efficiency. However, cost at completion is forecast to be approximately the same as budget at this time.



Performance	Previous Period	Current Period	Cumulative To Date
Amount Invoiced	$15,379,329	$3,688,307	$19,067,636
% Spent	18.5%	4.4%	23.0%
Earned Value	$17,712,200	$4,199,800	$21,912,000
% Complete	21.3%	5.1%	26.4%
CPI	**1.2**	**1.1**	**1.1**



Map of International District Station to South Bellevue.

Final Design Scope

Final Design for the East Link Extension is delivered by three major design contracts: two for civil improvements and one for systems improvements. This civil contract is for the design services from International District Station (IDS) to South Bellevue. The contract was awarded to Parsons Brinkerhoff, Inc (PB).

The scope of the services include detail design of the corridor, preparations of comprehensive construction contract documents, permit support, survey, geotech investigation, right-of-way planning, third party coordination, systems coordination, cost estimating, scheduling, sustainability report, bid support and community outreach support.

The project in this segment has been grouped into four Contract Packages: (1) E110 Rail Connection and Upgrades at IDS, (2) E120 Seismic Retrofits of WSDOT Structures, (3) E130 I-90 Civil/Architectural, which also includes the two at-grade stations, and (4) E140 Electrical/Mechanical Upgrades to the Tunnels.

Final Design Key Activities

- Continued finalizing WSDOT Work Plan.
- *Track attachment:* Consultant continues to develop weight mitigation measures for the concrete option in advance of discussions with WSDOT. Various concrete mixed are being evaluated as well parapet replacement. Alternatives decision scheduled for August 1, 2013
- *Mercer Island Station*: Open House and Design Commission Meetings were held, design progresses to 60%.
- *Rainier Avenue Station*: PB is moving forward with 30% west entrance (includes bridge deck removal) and the east entrance to 60% including integration of these two designs. ST is following up with WSDOT ASDE and FHWA on the bridge deck removal. Meeting to brief FHWA set for July 22.
- *Tunnels*: Three viable ventilation options have been discussed and options will be presented to WSDOT. A Hazard Analysis is being performed. Alternatives decision scheduled for August 1, 2013. Egress for both Tunnels has been developed and has been discussed with Seattle and Mercer Island Fire Departments. A new meeting has been set with the Fire Departments to discuss the Hazard Analysis.
- *Floating Bridge*: Basis of Evaluation has been finalized, track attachment and OCS pole concept relevant to the evaluation have been advanced. Wind and Wave Analysis has started in May. The evaluation for options for fire hydrants on the floating bridge has been completed. Local Analysis of the elevated structures has started.
- *Fixed Spans:* Level 1 Analyses have started on the D2, Rainier Ave Bridge and East Channel Bridge. Level 2 Analyses for the East and West Approaches have been discussed with WSDOT.
- A Floating bridge topo-survey is being planned for the end of June.

Final Design Schedule

Contract Packages	60% Submittal		90% Submittal		100% Submittal		IFB Submittal	
	Baseline	Forecast/ Actual	Baseline	Forecast/ Actual	Baseline	Forecast/ Actual	Baseline	Forecast/ Actual
E110	12/6/2013	12/6/2013	10/9/2014	10/9/2014	2/13/2015	2/13/2015	TBD	TBD
E120	1/31/2014	1/31/2014	1/15/2015	1/15/2015	3/20/2015	3/20/2015	TBD	TBD
E130	4/4/2014	4/4/2014	12/17/2014	12/17/2014	3/25/2015	3/25/2015	TBD	TBD
E140	12/20/2013	12/20/2013	8/19/2014	8/19/2014	1/15/2015	1/15/2015	TBD	TBD

Final Design Scope

Final Design for the East Link Extension is delivered by three major design contracts: two for civil improvements and one for systems improvements. This contract is for the systems design services for the entire alignment. The contract was awarded to LTK Engineering Services, Inc.

The scope of the services include detail design of the corridor, preparations of comprehensive construction contract documents, third party coordination, cost estimating, scheduling, and bid support.

Final Design Key Activities

- Coordinating wayside Systems elements with the South Bellevue to Redmond Civil Design Team including signals, duct banks, OCS overlaps and traction electrification equipment.
- The Systems work associated with the E340 60% submittal has been completed.
- Obtained WSDOT acceptance of Chapter 17A Corrosion Control Systems on I-90 Floating
- Coordinating OCS foundation designs with support structure on I-90 floating bridge.
- Finalized the lightning arrestor and grounding plan for the I-90 floating bridge, IRT issue E.
- Accepted track to earth resistance test plan for Track Bridge Assembly at Pueblo CO.
- In support of preliminary hazard analysis, developed I-90 vent zone concept for twin track design.
- Completed 3D model clash detection evaluation for the 120th and 130th street station.

Final Design Cost and Schedule for the Systems contract is not available at this time.

Scope

The S. 200th Link Extension is a 1.6-mile extension of light rail from the SeaTac/Airport Station to South 200th Street. After leaving SeaTac /Airport Station, the elevated route continues along the west side of International Blvd., turns southwest to cross South 188th Street, and continues along the east side of 28th Avenue South to an elevated station at South 200th Street sized to accommodate 4-car trains. A bus transfer facility, kiss and ride parking, and a 700 space structured park and ride facility will be located at the South 200th Street station. Up to 400 additional spaces will be constructed on Sound Transit property for use while the South 200th Street Station is an interim southern terminus of the Link system.

The project is being delivered through a design/build approach to accelerate project completion by September 2016.

Map of S. 200th Link Extension.

Key Project Activities

- S445 Parking Garage SOQ's have been received and under review.
- Continued review of the S445 Design Build RFP documents.
- Discussed with City of SeaTac staff advancement of station area planning and commitments needed for S440-Guideway/Station, S445 Parking Garage, and S447 Roadwork contracts.
- Sound Transit and City of SeaTac resolved S445 & S447 issues. A letter of concurrence and term sheets to be developed, which will result in an amendment to the Development Agreement.
- Discussed with Port of Seattle S440's schedule, approach, and traffic control for superstructure erection on airport property.
- ST working with Puget Sound Energy to finalize the guideway easement at east edge of Swept Wing substation. Agreement letter finalized. DB Contractor has requested access by July 13.

Closely Monitored Issues

- Concern regarding design integration of Systems into 100% Station package. Conduit routings have not yet been determined.
- DB contractor does not have a signed contract agreement for a systems design firm and may potentially delay the station and systems design schedule. Continued discussion for a solution.

Project Cost Summary

The S. 200th Link Extension project cost is summarized in two cost tables. The first table in in accordance with Sound Transit's Work Breakdown Structure (WBS), and in the second table, cost is summarize in accordance to the FTA's Standard Cost Categories (SCC) format. (Both tables' figures in millions).

WBS Phase Elements	Baseline Budget	Current Adopted Budget	Commit-ment to Date*	Incurred to Date	Est. Final Cost (EFC)	Adopted Budget vs. EFC
ADMINISTRATION	16.1	15.9	5.4	5.9	15.9	0.0
PRELIMINARY ENGINEERING	5.9	5.7	5.7	5.7	5.7	0.0
FINAL DESIGN	20.0	6.8	6.3	4.7	6.8	0.0
CONSTRUCTION SERVICES	15.1	17.3	15.0	1.5	17.3	0.0
3rd PARTY AGREEMENTS	6.9	7.1	5.5	1.5	7.1	0.0
CONSTRUCTION	275.7	286.9	180.7	35.0	286.9	0.0
VEHICLES	0.0	0.0	0.0	0.0	0.0	0.0
ROW	43.5	43.5	33.4	28.8	43.5	0.0
Capital Total	**383.2**	**383.2**	**251.9**	**83.1**	**383.2**	**0.0**
FINANCE COST	0	0	0	0	0	0
Project Total	**383.2**	**383.2**	**251.9**	**83.1**	**383.2**	**0.0**

The June 2013 projected Estimated Final Cost (EFC) continues to be consistent with the baseline amount of $383M. The incurred cost for this period increased approximately by $3M and of this amount, most expenditures are attributed to construction activities (42%) for the design build guideway & station contract (S440) and ROW acquisitions (35%).

The construction EFC under the SCC format overall is consistent with the baseline budget. For this period the overall increase of incurred cost of $3M is dispersed among a few categories: Professional Services-SCC 80 at 37% for S440 design effort, ROW-SCC 60 at 35% for several property acquisition transactions and approximately 29% of construc-tion activity for Guideway & Track Elements-SCC 10 and Sitework-SCC 40.

Project Elements by SCC	Baseline Budget	Current Adopted Budget	Commit-ment to Date*	Incurred to Date	Estimated Final Cost (EFC)	Adopted Budget vs. EFC
10 Guideway & Track Elements	144.8	137.4	98.3	12.0	126.5	10.9
20 Stations	46.4	48.9	12.4	1.5	45.9	3.0
30 Support Facilities: Yards, Shops	0.0	0.0	0.0	0.0	0.0	0.0
40 Sitework & Special Conditions	34.6	49.6	36.3	7.5	58.0	-8.4
50 Systems	30.8	19.8	18.5	2.3	25.3	-5.5
Construction Subtotal (SCC 10-50)	**256.6**	**255.7**	**165.6**	**23.3**	**255.6**	**0.0**
60 Row, Land, Existing Improvements	43.5	43.5	33.4	28.8	43.5	0.0
70 Vehicles	0.0	0.0	0.0	0.0	0.0	0.0
80 Professional Services	64.1	67.3	53.0	31.1	68.1	-0.8
90 Unallocated Contingency	19.0	16.7	0.0	0.0	15.9	0.8
Project Total (SCC 10-90)	**383.2**	**383.2**	**251.9**	**83.1**	**383.2**	**0.8**
100 Finance Cost	**0**	**0**	**0**	**0**	**0**	**0**
Project Total (SCC 10-90)	**383.2**	**383.2**	**251.9**	**83.1**	**383.2**	**0.0**

Cost Contingency Management

The overall project contingency balance as of June is $67M. In comparison to last month's total of $67M, this reporting period reflects no change in contingency. Contingency levels at this point and time continue to remain healthy for the amount of work remaining.

Design Allowance (DA): After baselining the project the design allowance of $26.7M was added to the base estimate for the design build work package. There will be no future reporting of DA.

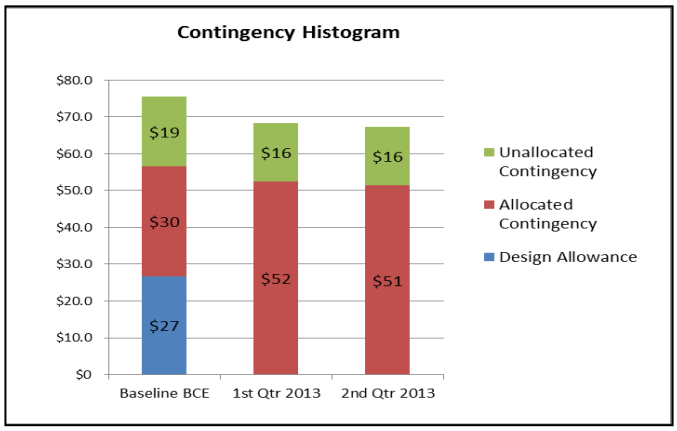
Allocated Contingency (AC): This period the AC shows a current balance of $51M, unchanged from last period.

Unallocated Contingency (UAC): This period reflects no change from the previous period. The overall UAC balance of $16M is less than BCE by $3M.

Contingency Status	BCE		Current Status	
	Amount	% of Project Total	Remaining Amount	% Remaining Work
Design Allowance [1]	$ 26,745,000	7%	---	---
Allocated Contingency	$ 29,839,732	8%	$ 51,405,900.70	21%
Unallocated Contingency [2]	$ 18,976,268	5%	$ 15,933,849.00	6%
Total	$ 75,561,000	20%	$ 67,339,750	27%

[1] *After baselining the project all the Design Allowance was combined in the base estimate.*

[2] BCE UAC adjusted due to SCC coding correction.



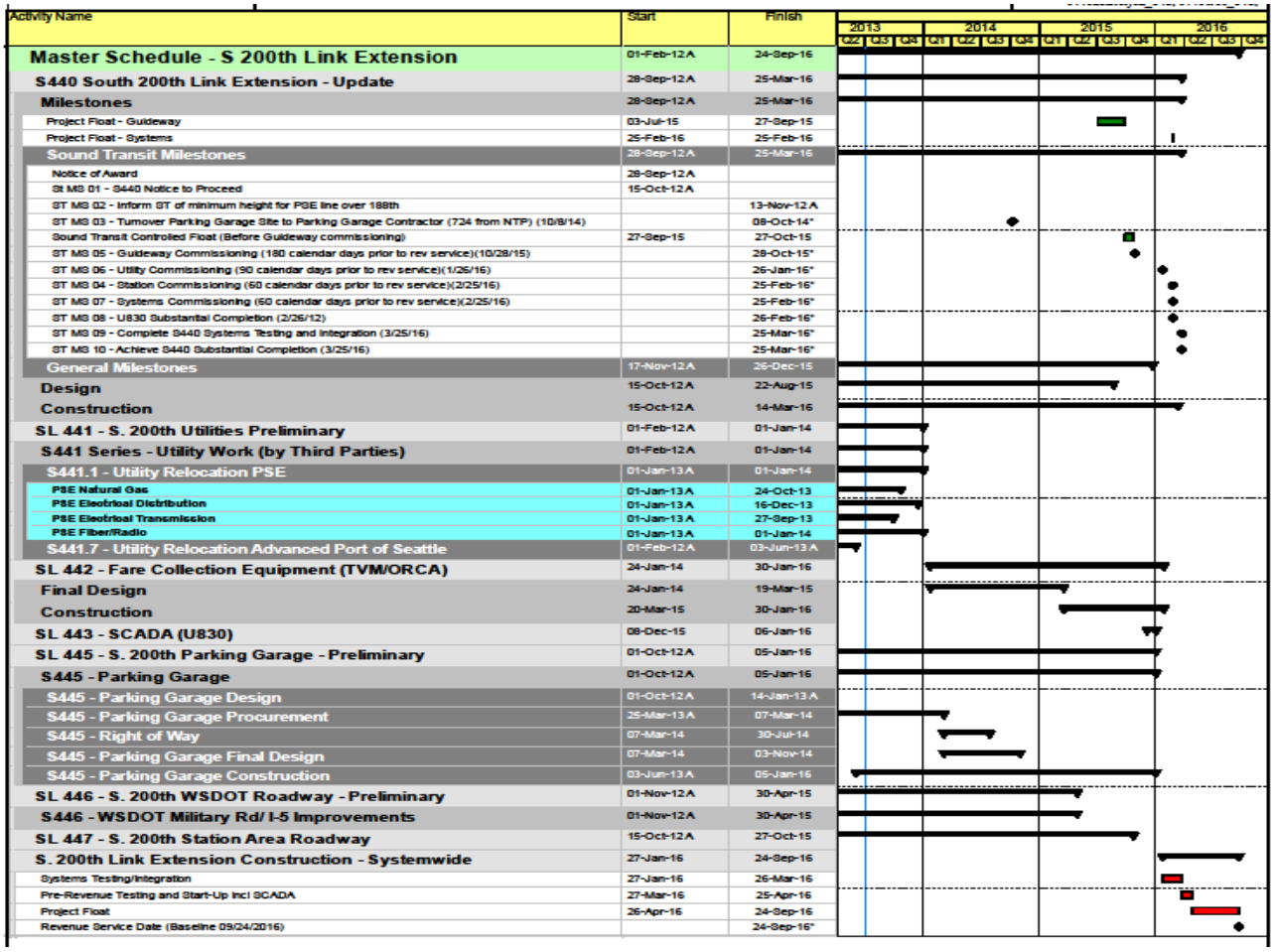
Project Schedule

The S. 200th Link Extension anticipated service launch is September 2016. (See Project Schedule Summary in the following page).

The project is currently in Final Design under the S440 Design-Build Guideway & Station contract. The Notice to Proceed for that contract was given on October 15, 2012. PCL and the designer HDR along with the Sound Transit Construction Management Team have mobilized on site. The groundbreaking ceremony occurred last period and preparation for the installation of drilled shaft foundations has commenced. Design continues, casting yard is being readied to cast segments and equipment procurement is underway.

The S445 Parking Garage Design/ Build contract is now currently out to bid.

Project Schedule, continued

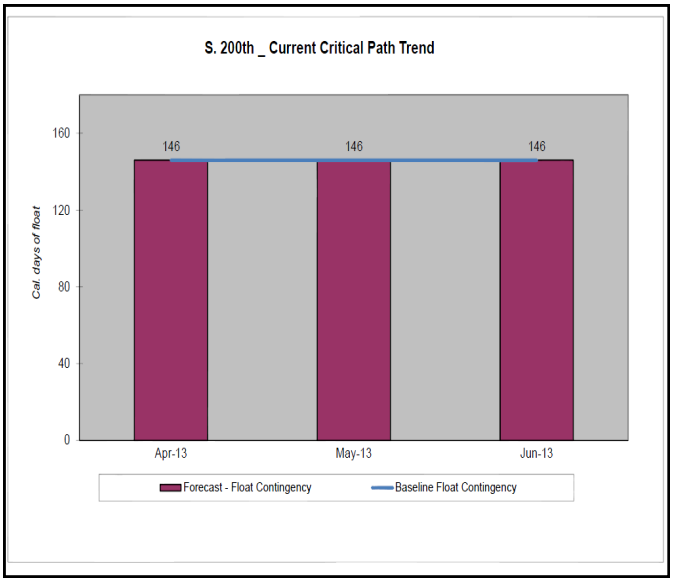


Activity Name	Start	Finish
Master Schedule - S 200th Link Extension	01-Feb-12 A	24-Sep-16
S440 South 200th Link Extension - Update	28-Sep-12 A	25-Mar-16
Milestones	28-Sep-12 A	25-Mar-16
Project Float - Guideway	03-Jul-15	27-Sep-15
Project Float - Systems	25-Feb-16	25-Feb-16
Sound Transit Milestones	28-Sep-12 A	25-Mar-16
Notice of Award	28-Sep-12 A	
ST MS 01 - S440 Notice to Proceed	15-Oct-12 A	
ST MS 02 - Inform ST of minimum height for PSE line over 188th		13-Nov-12 A
ST MS 03 - Turnover Parking Garage Site to Parking Garage Contractor (724 from NTP) (10/8/14)		08-Oct-14*
Sound Transit Controlled Float (Before Guideway commissioning)	27-Sep-15	27-Oct-15
ST MS 05 - Guideway Commissioning (180 calendar days prior to rev service)(10/28/15)		28-Oct-15*
ST MS 06 - Utility Commissioning (90 calendar days prior to rev service)(1/26/16)		26-Jan-16*
ST MS 04 - Station Commissioning (60 calendar days prior to rev service)(2/25/16)		25-Feb-16*
ST MS 07 - Systems Commissioning (60 calendar days prior to rev service)(2/25/16)		25-Feb-16*
ST MS 08 - U830 Substantial Completion (2/26/12)		26-Feb-16*
ST MS 09 - Complete S440 Systems Testing and Integration (3/25/16)		25-Mar-16*
ST MS 10 - Achieve S440 Substantial Completion (3/25/16)		25-Mar-16*
General Milestones	17-Nov-12 A	26-Dec-15
Design	15-Oct-12 A	22-Aug-15
Construction	15-Oct-12 A	14-Mar-16
SL 441 - S. 200th Utilities Preliminary	01-Feb-12 A	01-Jan-14
S441 Series - Utility Work (by Third Parties)	01-Feb-12 A	01-Jan-14
S441.1 - Utility Relocation PSE	01-Jan-13 A	01-Jan-14
PSE Natural Gas	01-Jan-13 A	24-Oct-13
PSE Electrical Distribution	01-Jan-13 A	16-Dec-13
PSE Electrical Transmission	01-Jan-13 A	27-Sep-13
PSE Fiber/Radio	01-Jan-13 A	01-Jan-14
S441.7 - Utility Relocation Advanced Port of Seattle	01-Feb-12 A	03-Jun-13 A
SL 442 - Fare Collection Equipment (TVM/ORCA)	24-Jan-14	30-Jan-16
Final Design	24-Jan-14	19-Mar-15
Construction	20-Mar-15	30-Jan-16
SL 443 - SCADA (U830)	08-Dec-15	06-Jan-16
SL 445 - S. 200th Parking Garage - Preliminary	01-Oct-12 A	05-Jan-16
S445 - Parking Garage	01-Oct-12 A	05-Jan-16
S445 - Parking Garage Design	01-Oct-12 A	14-Jan-13 A
S445 - Parking Garage Procurement	25-Mar-13 A	07-Mar-14
S445 - Right of Way	07-Mar-14	30-Jul-14
S445 - Parking Garage Final Design	07-Mar-14	03-Nov-14
S445 - Parking Garage Construction	03-Jun-13 A	05-Jan-16
SL 446 - S. 200th WSDOT Roadway - Preliminary	01-Nov-12 A	30-Apr-15
S446 - WSDOT Military Rd/ I-5 Improvements	01-Nov-12 A	30-Apr-15
SL 447 - S. 200th Station Area Roadway	15-Oct-12 A	27-Oct-15
S. 200th Link Extension Construction - Systemwide	27-Jan-16	24-Sep-16
Systems Testing/Integration	27-Jan-16	26-Mar-16
Pre-Revenue Testing and Start-Up incl SCADA	27-Mar-16	25-Apr-16
Project Float	26-Apr-16	24-Sep-16
Revenue Service Date (Baseline 09/24/2016)		24-Sep-16*

Critical Path

The critical path of S. 200th Link Extension runs through S440 which commences with the procurement of the guideway erection truss, guideway erection, alignment, post tension and drainage, plinth and track installation, signal and systems and concludes with system wide testing and integration.

Float contingency is at 146 days.



Right-of-Way

The S. 200th Link Extension involves the acquisition of a range of property interests, including owner and tenant residential and commercial relocations. Property interests include compensable (e.g., easements, fee acquisitions) and non-compensable rights (e.g., rights of entry). The right-of-way program is summarized below.

Line Section	Total Parcels Certified	Offers Made	Signed Agreements	Admin. Settlements	Possession and Use	Closings to date	Baseline Relocations Required	Relocations Completed
S. 200th Link	61	56	11	0	23	13	6	1

The S. 200th Link Extension project involved the advance acquisition of three parcels that the Board approved in April 2006 and June 2007; the final decree was entered in July 2009. These parcels were acquired through the Regional Fund Contingency. Sound Transit's protective acquisition of these properties prevented development of parcels needed for the project. The acquisition of property rights from an additional 52 parcels along the route was authorized by the Board in July 2011. On February 23, 2012 the Board authorized the acquisition of property rights from an additional six parcels along the route.

The Port of Seattle commissioners approved the Memorandum of Agreement (MOA) for use of Port property. The Sound Transit Board approved the MOA on June 28, 2012.

Offers have been made on 56 parcels. A total of 33 parcels have now been submitted for condemnation and 32 parcels have been filed in court. The condemnation on the remaining parcel has been dismissed. ST has been granted Possession and Use though the court for 23 parcels. Sound Transit has taken physical possession of four parcels, although relocation efforts continue and are not complete.

Quality Assurance Activities

Activities

- Participated in PCL/HDR Track IFC Design Package Audit
- Participated in PCL/HDR Substructure B IFC Package Audit
- Participated in PCL/HDR S440 Port Utilities IFC Audit
- Attended CM training for Environmental BMP Contaminated Solid and Water.

Description	June 2013	Notes
No. of Audits Planned	3	S440 Track IFC, S440 Port Utilities IFC, S440 Substructure B IFC
No. of Audits Completed	1	S440 Substructure Pkg A IFC
Reports in Progress	3	S440 Substructure Pkg B IFC, S440 Special Test Lab
No. of Audits Postponed	0	None

Community Outreach

- Attended SeaTac International Festival.
- Sent out notifications for start of construction at S. 182nd Street and International Blvd.
- Sent out notifications for pre-construction video and surveying.

Sound Transit Board Actions

Motion Number	Description	Date
	None to report this period.	

Environmental

- None to report at this time.

Contract Packages

The South 200th Link Extension consists of two major contract packages, both by Design Build methods, and two minor contracts. Below is a brief scope description of each package. More detailed information for each contract will be provided on the following pages upon commencement of construction.

- **S440 Design Build Guideway and Station** - This contract involves the design and construct of an elevated guideway (1.6 miles) and station, site work, civil /roadwork, and systems. See S440 contract page for detailed information on the following page.

- **S445 Design Build – Parking Garage and Plaza** – This contract involves the design and construction of a parking garage (700 space structure), passenger pick-up and drop-off lot, plaza area, retail space and surface parking.

- **S446 Military Road & South 200th Street Improvements** – This contract package consists of construction of roadway and traffic signals work.

- **S447 Station Area Roadways & Surface Parking**- This contract package consists of station area roadway, surface parking, and non-motorized Improvements (sidewalks, traffic signals, pedestrian/bicycle connection, roadwork).

S440 Contract—Design Build (Guideway and Station)

Current Progress

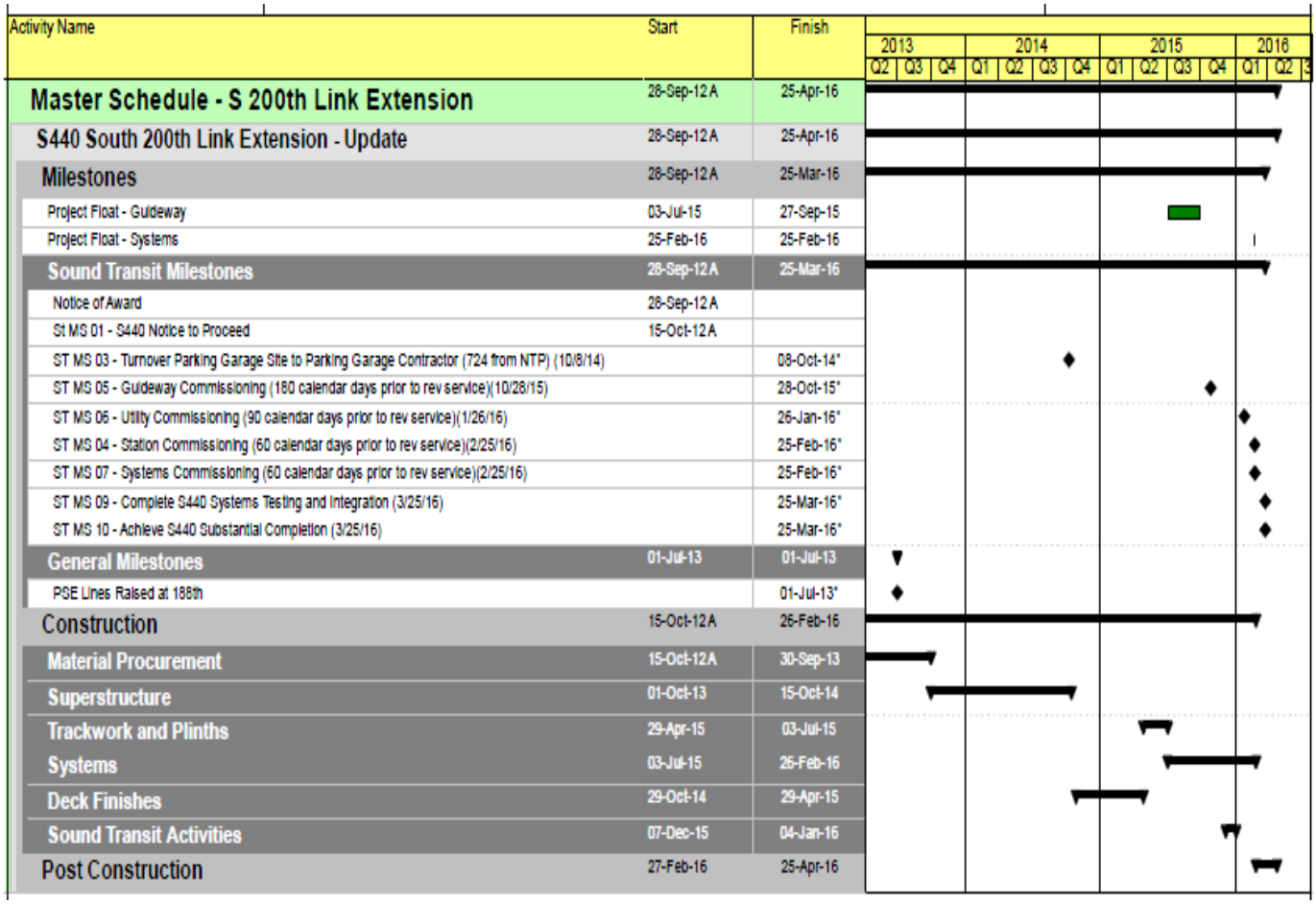
The DB Contractor continues to work on all phases of the design. Several design packages (50%, 100% and IFC) were submitted for review with key staff from ST, Port and City of SeaTac. The 50% packages include: Station, Civil and Systems. The 100% packages: Substructure and Track. The IFC packages all utility relocations for City of SeaTac, Midway Sewer, Highline Water, PSE and Port of Seattle. Coordination meetings with utility companies continue on a bi-weekly and ad-hoc basis.

Construction along the alignment officially began this month with PSE utility relocation work on little 28th St rerouting power and communication lines around columns B31 and B32; these relocations are now completed. Construction is also taking place at the casting yard, setup of five out of seven casting foundations were completed this month; overall 70% complete of casting yard ready for operations. Sitework and utility work continues. The DB Contractor began pot-holing existing utilities for drill shaft locations. Drilled shaft installation is expected next period.

Overall the progress of this contract represents 18% physical completion; the Design element is 80.79% complete and Construction is 13.3%.

Critical Path

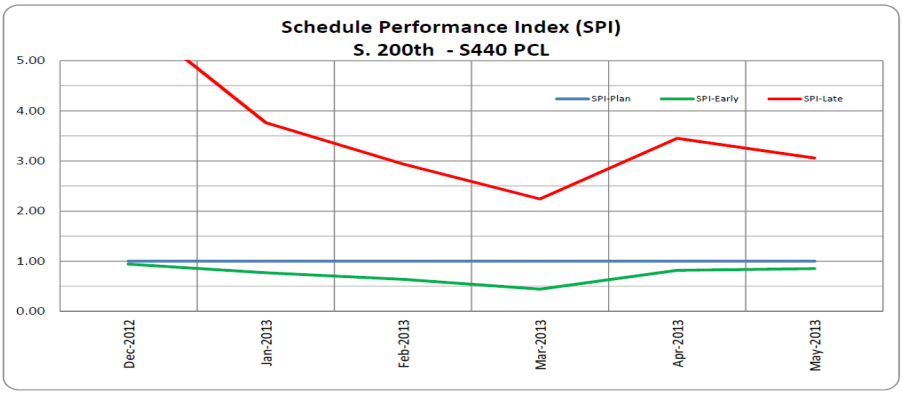
The critical path commences with the procurement of the guideway erection truss, guideway erection, alignment, post tension and drainage, plinth and track installation, signal and systems and concludes with system wide testing and integration. Design submittals and production rates will be monitored closely.


Activity Name
Start
Finish
2013
2014
2015
2016
Q2 Q3 Q4 Q1 Q2 Q3 Q4 Q1 Q2 Q3 Q4 Q1 Q2
Master Schedule - S 200th Link Extension 28-Sep-12 A 25-Apr-16
S440 South 200th Link Extension - Update 28-Sep-12 A 25-Apr-16
Milestones 28-Sep-12 A 25-Mar-16
Project Float - Guideway 03-Jul-15 27-Sep-15
Project Float - Systems 25-Feb-16 25-Feb-16
Sound Transit Milestones 28-Sep-12 A 25-Mar-16
Notice of Award 28-Sep-12 A
St MS 01 - S440 Notice to Proceed 15-Oct-12 A
ST MS 03 - Turnover Parking Garage Site to Parking Garage Contractor (724 from NTP) (10/8/14) 08-Oct-14*
ST MS 05 - Guideway Commissioning (180 calendar days prior to rev service)(10/28/15) 28-Oct-15*
ST MS 06 - Utility Commissioning (90 calendar days prior to rev service)(1/26/16) 26-Jan-16*
ST MS 04 - Station Commissioning (60 calendar days prior to rev service)(2/25/16) 25-Feb-16*
ST MS 07 - Systems Commissioning (60 calendar days prior to rev service)(2/25/16) 25-Feb-16*
ST MS 09 - Complete S440 Systems Testing and Integration (3/25/16) 25-Mar-16*
ST MS 10 - Achieve S440 Substantial Completion (3/25/16) 25-Mar-16*
General Milestones 01-Jul-13 01-Jul-13
PSE Lines Raised at 188th 01-Jul-13*
Construction 15-Oct-12 A 26-Feb-16
Material Procurement 15-Oct-12 A 30-Sep-13
Superstructure 01-Oct-13 15-Oct-14
Trackwork and Plinths 29-Apr-15 03-Jul-15
Systems 03-Jul-15 26-Feb-16
Deck Finishes 29-Oct-14 29-Apr-15
Sound Transit Activities 07-Dec-15 04-Jan-16
Post Construction 27-Feb-16 25-Apr-16

Link Light Rail
S. 200th Link Extension – Design Build

Schedule Performance Index

The SPI is currently reporting below 1.00 at 0.8 due to the continued delay in mobilization of the casting yard and the commencement of drilled shaft mobilization in July. The project team is closely monitoring the trends.



Key Activities

Current Period

- Continued Casting Yard setup activities in Enumclaw.
- Mobilized and setup drilled shaft equipment for drilling operations starting in July.
- Constructing rebar cages at warehouse for drilled shafts.
- Began 182nd detour work; excavation, subgrade grading, prep relocate luminaires, and build new construction entrance.
- Construct temporary detention ponds at triangle area and south of Angle Lake Station.
- Began conducting condition assessments of properties along alignment prior to start of construction.

Next Period

- Continue design work, meetings, submittals and reviews.
- More design packages anticipated for submission.
- Continue setup of Casting Yard. Operations anticipated to begin September 2013.
- Continue construction activities at South 182nd St.
- Complete Storm System video survey.
- Continue condition assessments of properties.

Closely Monitored Issues

- The Project Requirements (PR) call for continuous spans in areas of special track. This issue is currently in review and may lead to a redesign of some elements of the guideway in the areas of the special track (pocket track, x -over) with possible impact to schedule. ST received the technical submittal and are reviewing it with the CM track experts.
- The DB Contractor has not signed a contract yet with a Systems design firm to provide the engineer of record the stamp on Signals, Communications and TPSS system drawings. This may potentially delay the Station and System design schedule. DB is developing an alternative approach to resolve this matter.

Cost Summary

Present Financial Status	Amount
S440 Contractor—PCL Civil Contractors, Inc.	
Original Contract Value	$169,000,000
Change Order Value	$1,547,089
Current Contract Value	$170,547,089
Total Actual Cost (Amount Billed)	$29,709,707
% of Authorized Billed to-date	17%
Physical Percent Complete:	18%
Authorized Contingency	$13,520,000
Contingency Drawdown	$1,547,089
Contingency Index*	1.4

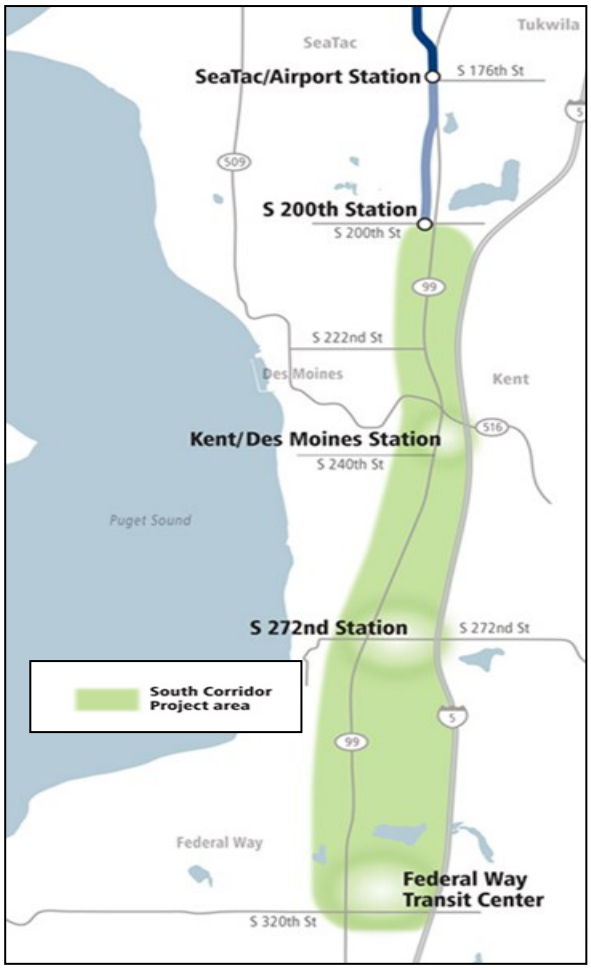
Mobilizing rig on site for next period drilling operations.

Scope

The scope of work for this project includes Alternatives Analysis, followed by a Draft and Final Environmental Impact Statement leading to Sound Transit Board adoption of the project and FTA issuance of a Record of Decision in 2016. The project will also include conceptual engineering design to support the environmental analysis.

In addition to advancing the engineering design of the project sufficient to obtain a Record of Decision, design of the preferred alternative will be advanced through preliminary engineering for the initial 2.3-mile segment from South 200th Street to Kent/Des Moines. This will prepare this segment of the project for final design and construction, with anticipated revenue operations in 2023. Although not part of the initial scope, Sound Transit may exercise options to extend the scope of preliminary engineering south of Kent/Des Moines to South 272nd Street or the Federal Way Transit Center.

This project is updated quarterly.



Map of Federal Way Transit Extension project area.

Key Project Activities/Issues

- HDR continues work on the Phase 1 contract for Alternatives Analysis.
- Addressed comments on Level 1 alternatives screening report and preparing Level 2 report.
- Preparing to select DEIS alternatives in September

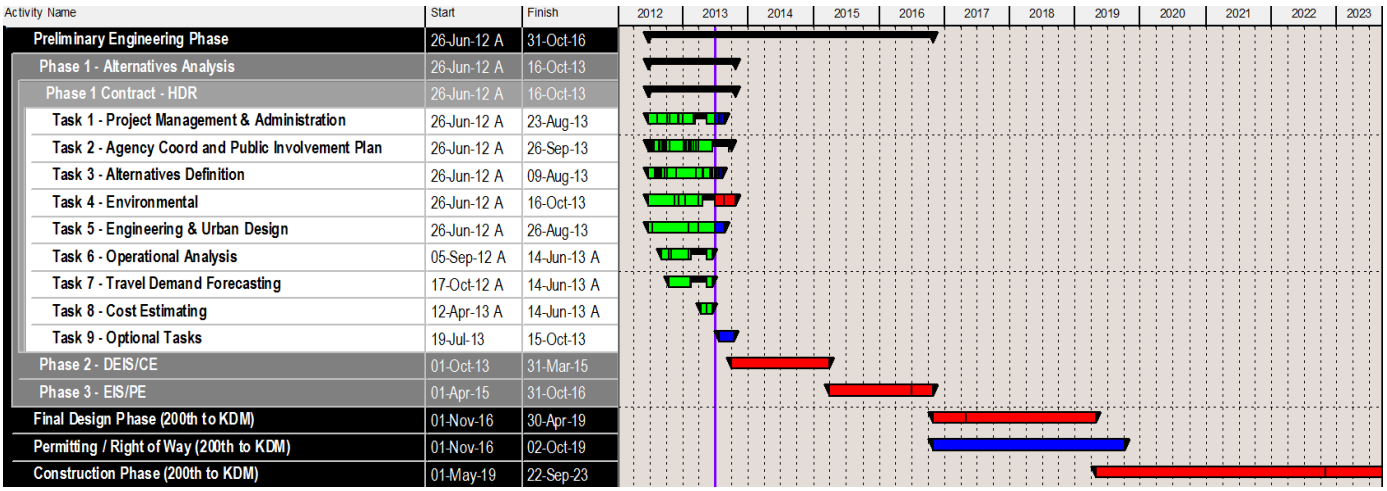
Project Cost Summary

The Federal Way Transit Extension project is currently funded through the completion of preliminary engineering (PE) and environmental documentation from S. 200th to Kent/Des Moines and for environmental documentation from Kent/Des Moines to Federal Way. Board approval for additional funding for final design and construction of S. 200th St. to Kent/Des Moines and for preliminary engineering of Kent/Des Moines to Federal Way to will be sought upon completion of funded work. Table (below) figures in millions.

Phase	Adopted Budget	Commitment to Date	Incurred to Date	Forecasts and Trends	Estimated Final Cost (EFC)	Budget Versus EFC
Administration	$9.4	$0.7	$0.8	$8.7	$9.4	$0.0
Preliminary Engineering	$30.9	$3.2	$2.6	$27.7	$30.9	$0.0
Third Party	$1.6	$0.0	$0.0	$1.6	$1.6	$0.0
Total	$0.0	$0.0	$0.0	$0.1	$0.1	($0.1)
	$41.8	**$3.9**	**$3.4**	**$38.1**	**$42.0**	**($0.1)**

Project Schedule

Alternatives Analysis is expected to go through mid-2013. The DEIS and Conceptual Engineering will go through the end of 2014, the FEIS and Preliminary Engineering will go through late-2016, and it is anticipated that the Board will adopt the project and the FTA will issue the ROD in late 2016.


Activity Name
Start
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2012
2013
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2017
2018
2019
2020
2021
2022
2023
Preliminary Engineering Phase 26-Jun-12 A 31-Oct-16
Phase 1 - Alternatives Analysis 26-Jun-12 A 16-Oct-13
Phase 1 Contract - HDR 26-Jun-12 A 16-Oct-13
Task 1 - Project Management & Administration 26-Jun-12 A 23-Aug-13
Task 2 - Agency Coord and Public Involvement Plan 26-Jun-12 A 26-Sep-13
Task 3 - Alternatives Definition 26-Jun-12 A 09-Aug-13
Task 4 - Environmental 26-Jun-12 A 16-Oct-13
Task 5 - Engineering & Urban Design 26-Jun-12 A 26-Aug-13
Task 6 - Operational Analysis 05-Sep-12 A 14-Jun-13 A
Task 7 - Travel Demand Forecasting 17-Oct-12 A 14-Jun-13 A
Task 8 - Cost Estimating 12-Apr-13 A 14-Jun-13 A
Task 9 - Optional Tasks 19-Jul-13 15-Oct-13
Phase 2 - DEIS/CE 01-Oct-13 31-Mar-15
Phase 3 - EIS/PE 01-Apr-15 31-Oct-16
Final Design Phase (200th to KDM) 01-Nov-16 30-Apr-19
Permitting / Right of Way (200th to KDM) 01-Nov-16 02-Oct-19
Construction Phase (200th to KDM) 01-May-19 22-Sep-23

Sound Transit Board Actions

Board motions and resolutions directly related to Federal Way Transit Extension is summarized in the table below for this quarter.

Motion Number	Description	Date
	None to report this period.	

Community Outreach

- Held NEPA Scoping meetings.
- Held presentations with various neighborhood councils.
- Participated in transportation fair at Des Moines Senior Activity Center.

Environmental

- Alternatives development and screening continues.

Phase 1 - Alternatives Analysis and EIS Scoping Overview

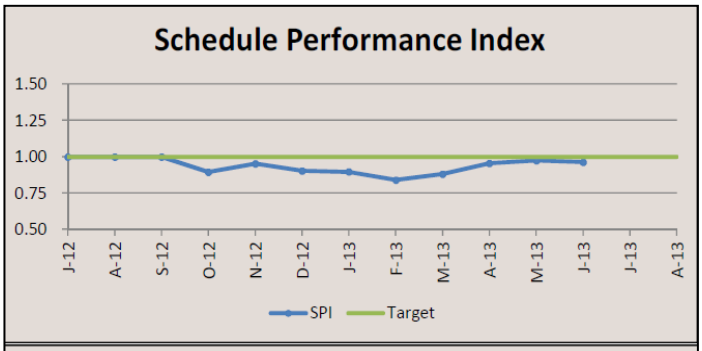
Sound Transit executed a professional services agreement with HDR Engineering, Inc. for Phase 1 professional services including an Alternatives analysis and EIS scoping in June 2012.

Key Phase 1 Activities

- Completed Level 2 alternatives screening report; briefed Capital Committee in June 2013.
- Conducted EIS Scoping and held public meetings. Will develop EIS Scoping Summary Report.
- Working to complete Affected Environment technical memos and preparing project Purpose & Need report.
- Conducting regular coordination meetings with various stakeholders including FTA, WSDOT, the Interagency Working Group, Metro, PSRC, Highline Community College, and the cities.

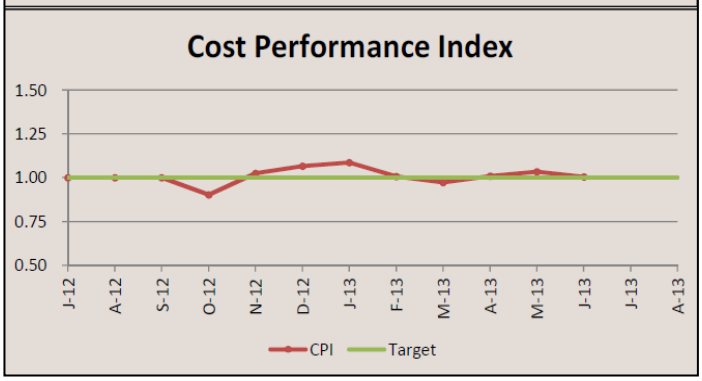
Phase 1 Schedule Performance

The Schedule Performance Index (SPI) trends at 0.96 through June, indicating work performed is close to the original plan. Completion of the Level 2 screening report, EIS Scoping, and Board identification of the EIS alternatives will push the Phase 1 completion to September, a one month delay.



Phase 1 Cost Performance

$2.7M of the total contract amount, approximately 83%, has been spent through June. The Phase 1 percent complete reported at the end of June is 83%, resulting in an earned value of $2.7M. The cumulative Cost Performance Index (CPI) is 1.00, which means that the expenditures are in line with the earned value. Based on the current trend, final cost is expected to be within budget.



Phase I Performance	Previous Phase I Cumulative	Current Quarter	Phase I Cumulative through Mar 2013
Amount Invoiced	$1,961,430	$629,225	$2,653,655
% Spent	61%	22%	83%
Earned Value	$1,910,160	$756,424	$2,666,584
% Complete	66%	17%	83%
CPI	**0.88**	**1.26**	**0.96**
SPI	**0.97**	**1.20**	**1.00**

Scope

In cooperation with the City of Tacoma and Pierce Transit, Sound Transit is studying the potential of expanding the Tacoma Link light rail system in the context of the City and Pierce Transit service and capital plans.

This project is updated quarterly.

The Tacoma Link Expansion Project is in Preliminary Engineering Phase.

Tacoma Link

Key Project Activities/Issues

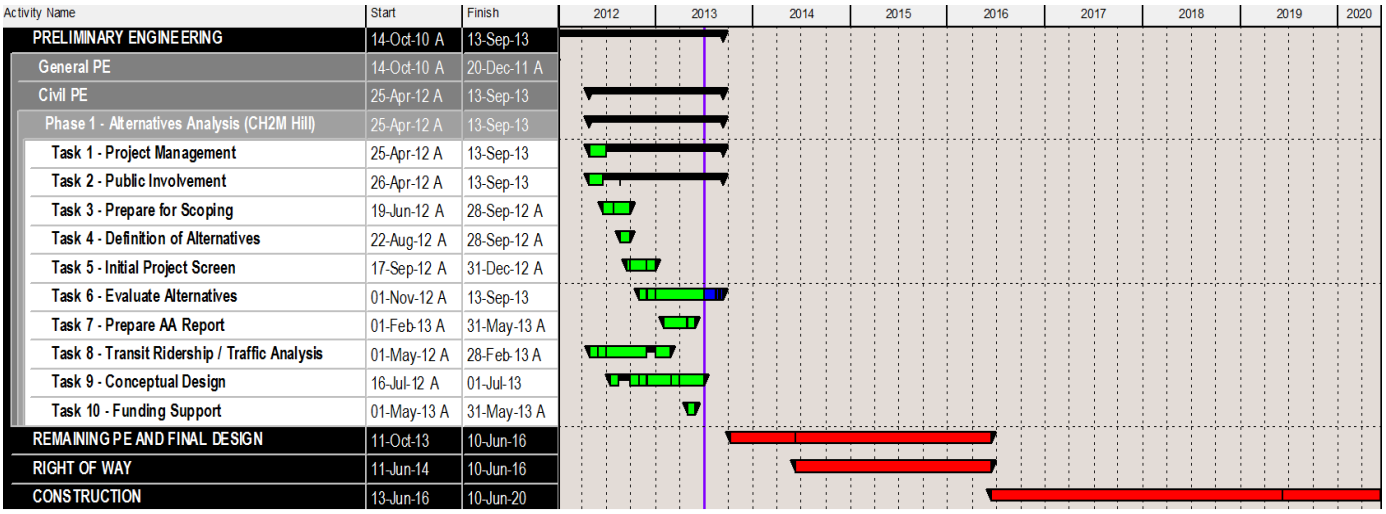
- Sound Transit executed a professional services contract with CH2M HILL in April 2012 to perform an alternatives analysis (AA) and EIS scoping.
- Sound Transit developed the scope of work with input from City of Tacoma and Pierce Transit. A technical advisory committee comprised of City, Pierce Transit and Sound Transit staff convened to provide technical feedback and guidance throughout the AA process. Sound Transit, the City of Tacoma and Pierce Transit signed a cooperative agreement term sheet.
- Until the FTA issues new guidance under MAP-21, Sound Transit will continue to follow FTA's AA guidance in order to maintain eligibility for future Small Starts grant funding.
- Sound Transit held early scoping meetings in August 2012, including public & agency early scoping meetings/open houses. The 30-day early scoping comment period ran from August 17 – September 17, 2012. Sound Transit submitted an AA initiation package to the FTA in October 2012.
- The AA evaluated corridor and alignment alternatives and also evaluated BRT as a mode alternative. In May 2013, the Sound Transit board selected the E1 corridor as the preferred corridor on which to perform additional design work and environmental study.
- In 3rd QTR 2013, work will continue to refine engineering assumptions and conduct technical analysis on potential route alternatives, and on their potential environmental impacts to inform the decision on the appropriate type of environmental documentation.

Project Cost Summary

The Tacoma Link Alternatives Analysis is currently funded through the completion of the alternatives analysis, PE and Environmental Documentation. Funding included in the ST2 financial plan represents a maximum capital contribution by Sound Transit to the overall cost of expanding Tacoma Link if other public or private entities provide additional funding. Board approval for funding environmental documentation, preliminary engineering, final design and construction will be sought upon completion of the alternatives analysis. , Board approval for funding preliminary engineering, final design and construction will be sought upon completion of the environmental documentation, a project funding strategy and agreements with funding partners. The proposed 2014 budget includes an increase to the project lifetime budget to fund Right of Way activities needed to advance the design work. (Table in millions.)

Phase	Adopted Budget	Commitment to Date	Incurred to Date	Forecasts and Trends	Estimated Final Cost (EFC)	Budget Versus EFC
Administration	$1.0	$0.4	$0.5	$0.6	$1.0	($0.0)
Preliminary Engineering	$4.7	$1.0	$0.7	$3.7	$4.7	$0.0
Contingency	$0.0	$0.0	$0.0	$0.1	$0.1	($0.1)
Total	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
	$5.8	**$1.5**	**$1.1**	**$4.4**	**$5.8**	**($0.1)**

Project Schedule


Activity Name
Start
Finish
2012
2013
2014
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2016
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2018
2019
2020
PRELIMINARY ENGINEERING 14-Oct-10 A 13-Sep-13
General PE 14-Oct-10 A 20-Dec-11 A
Civil PE 25-Apr-12 A 13-Sep-13
Phase 1 - Alternatives Analysis (CH2M Hill) 25-Apr-12 A 13-Sep-13
Task 1 - Project Management 25-Apr-12 A 13-Sep-13
Task 2 - Public Involvement 26-Apr-12 A 13-Sep-13
Task 3 - Prepare for Scoping 19-Jun-12 A 28-Sep-12 A
Task 4 - Definition of Alternatives 22-Aug-12 A 28-Sep-12 A
Task 5 - Initial Project Screen 17-Sep-12 A 31-Dec-12 A
Task 6 - Evaluate Alternatives 01-Nov-12 A 13-Sep-13
Task 7 - Prepare AA Report 01-Feb-13 A 31-May-13 A
Task 8 - Transit Ridership / Traffic Analysis 01-May-12 A 28-Feb-13 A
Task 9 - Conceptual Design 16-Jul-12 A 01-Jul-13
Task 10 - Funding Support 01-May-13 A 31-May-13 A
REMAINING PE AND FINAL DESIGN 11-Oct-13 10-Jun-16
RIGHT OF WAY 11-Jun-14 10-Jun-16
CONSTRUCTION 13-Jun-16 10-Jun-20

Community Outreach

- Continue coordination with City of Tacoma and stakeholders.
- Attended the Dome District event.
- Participated in a site visit for new maintenance base.

Scope

Sound Transit is reviewing and evaluating current and future light rail storage and maintenance requirements to support the development, design, and construction of a future light rail operations and maintenance facility for proposed system expansion.

This project is updated quarterly.

Key Project Activities/Issues

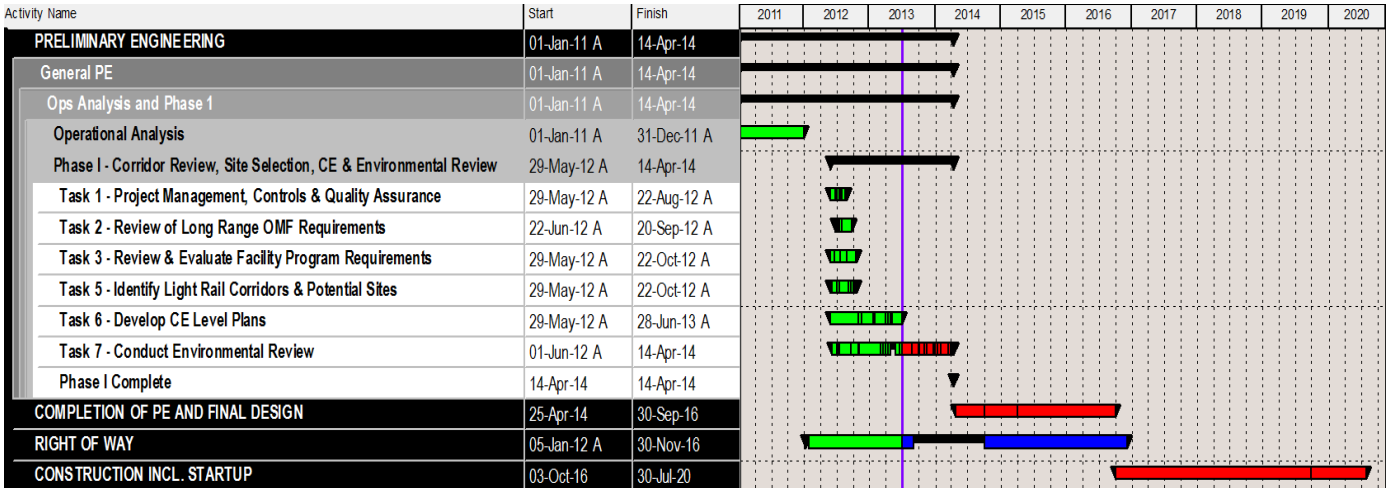
- Huitt-Zollars, Inc. continues work on their Phase 1 contract for conceptual engineering and environmental review.
- Identified long range facility requirements, potential corridors, and sites for the new Operations and Maintenance Satellite Facility (OMSF). Conducted environmental scoping and produced a scoping summary report.
- ST Board identified DEIS alternatives in December 2012.
- Pursuing protective acquisition of a parcel associated with one of the potential sites.
- Preparing to circulate the DEIS for review in 4th QTR 2013.

Program Cost

The Link Operations and Maintenance Satellite Facility (OMSF) project is currently funded through the completion of preliminary engineering (PE) and environmental documentation. Board approval for additional funding for final design and construction will be sought upon completion of PE. Table (below) figures in millions.

Phase	Adopted Budget	Commit-ment to Date	Incurred to Date	Forecasts and Trends	Estimated Final Cost (EFC)	Budget Versus EFC
Administration	$3.2	$0.3	$0.4	$2.9	$3.2	$0.0
Preliminary Engineering	$5.7	$2.4	$2.4	$3.3	$5.7	$0.0
3rd Party Agreements	$0.4	$0.0	$0.0	$0.4	$0.4	$0.0
Right of Way	$0.1	$0.6	$0.6	$22.5	$23.2	($23.1)
Total	**$9.4**	**$3.4**	**$3.4**	**$29.1**	**$32.5**	**($23.1)**

Program Schedule


Activity Name
Start
Finish
2011
2012
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2014
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2017
2018
2019
2020
PRELIMINARY ENGINEERING 01-Jan-11 A 14-Apr-14
General PE 01-Jan-11 A 14-Apr-14
Ops Analysis and Phase 1 01-Jan-11 A 14-Apr-14
Operational Analysis 01-Jan-11 A 31-Dec-11 A
Phase I - Corridor Review, Site Selection, CE & Environmental Review 29-May-12 A 14-Apr-14
Task 1 - Project Management, Controls & Quality Assurance 29-May-12 A 22-Aug-12 A
Task 2 - Review of Long Range OMF Requirements 22-Jun-12 A 20-Sep-12 A
Task 3 - Review & Evaluate Facility Program Requirements 29-May-12 A 22-Oct-12 A
Task 5 - Identify Light Rail Corridors & Potential Sites 29-May-12 A 22-Oct-12 A
Task 6 - Develop CE Level Plans 29-May-12 A 28-Jun-13 A
Task 7 - Conduct Environmental Review 01-Jun-12 A 14-Apr-14
Phase I Complete 14-Apr-14 14-Apr-14
COMPLETION OF PE AND FINAL DESIGN 25-Apr-14 30-Sep-16
RIGHT OF WAY 05-Jan-12 A 30-Nov-16
CONSTRUCTION INCL. STARTUP 03-Oct-16 30-Jul-20

Phase 1 - Conceptual Engineering and DEIS Overview

Sound Transit executed a professional services agreement with Huitt-Zollars, Inc. for civil engineering and architectural design services and issued NTP for Phase 1, Conceptual Engineering and DEIS, for the Link Operations and Maintenance Satellite Facility (OMSF) project in May 2012.

Current Key Phase 1 Activities

- Obtained ST Board decision on DEIS alternatives in December 2012.
- Continued coordination with local jurisdictions and stakeholders.
- Preparing DEIS and Design Report.

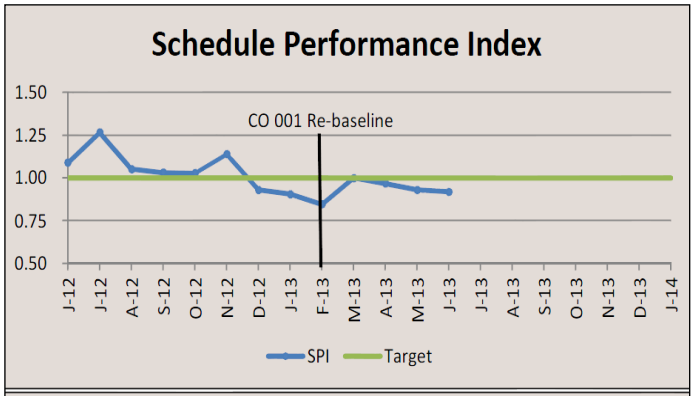
Phase 1 Schedule Performance

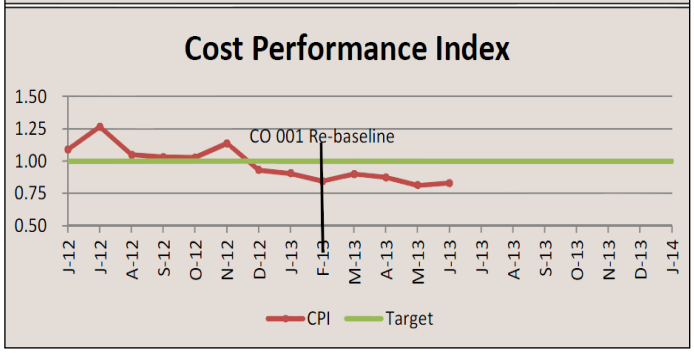
The Schedule Performance Index (SPI) trends at 0.92 through June 2013, which means that work accomplished is less than the revised baseline plan.

Change Order 001 modified the contract's Performance Management Baseline and extended the schedule through January 2014. This change reflected increased time and cost associated with the Board's direction to review more sites than anticipated.

Phase 1 Cost Performance

$2.1 M of the total contract amount, approximately 95%, has been spent through June 2013. The Phase 1 percent complete reported through June 2013 is 79%, resulting in an earned value of $1.8 M. The cumulative Cost Performance Index (CPI) is 0.83, which means that the expenditures are higher than the earned value. Based on the current trend, final cost is expected to be above budget. A potential increase in the Phase 1 contact will be evaluated early in the 3rd quarter.





Phase I Performance	Previous Period	Jan– Mar 2013	Cumulative Thru Mar 2013
Amount Invoiced	$1,824,145	$323,612	$2,147,757
% Spent	83%	12%	95%
Earned Value	$1,642,140	$140,397	$1,782,537
% Complete	74%	5%	79%
SPI	**1.00**	**0.34**	**0.92**
CPI	**0.90**	**0.79**	**0.83**

Staffing

Recruiting Activity

During this reporting period (May 2013) the following positions were filled to support the capital program.

Position	Project Assignment	Planned Hire Date
Sr. Real Property Agent	East Link Extension	Deferred 2011
Sr. Real Property Agent	Northgate Link Extension	2012 Attrition
Project Manager	Northgate Link Extension	2012 Attrition*
Architect	Unspecified Capital Project Support	May 2012
Sr. Civil Engineer	Unspecified Capital Project Support	February 2013*
Sr. CAD Drafter	Unspecified Capital Project Support	February 2013

*Position *filled* internally

Recruiting continued during this reporting period for the following design, engineering and construction management positions:

Position	Project Assignment	Planned Hire Date
Construction Manager	Northgate Link Extension	January 2012
Construction Manager	East Link Extension	2012 – reclass*
Deputy Construction Manager	Non-corridor projects	2012 – reclass*
Principal Construction Manager	East Link	2012 – reclass*
Principal Construction Manager	Systems	2012 – reclass*
Construction Manager	Sounder and Regional Express	2012 Attrition
Deputy Executive Director	Business and Construction Services	2012 Attrition
Sr. Risk Engineer	Project Controls	2012 Attrition
Director	Systems Engineering and Integration	2013 Attrition*
Deputy Director	Civil and Structural Design	2013 Attrition*
Civil Engineer	Right of Way	2013 Attrition*
Project Control Specialist	University Link Extension	2013 Attrition*
Project Control Coordinator	Project Controls	2013 Attrition*
Sr. Systems Engineer	Enterprise	February 2013
Sr. Scheduling Engineering	Project Controls	February 2013
Art Collection Coordinator	ST*art*	February 2013
Config. and Change Mgmt Spec.	Project Controls	March 2013
Senior Systems Engineer	Traction Power	April 2013
Senior Systems Engineer	Communication Systems	April 2013

**Attrition resulting from internal promotion to vacant position*

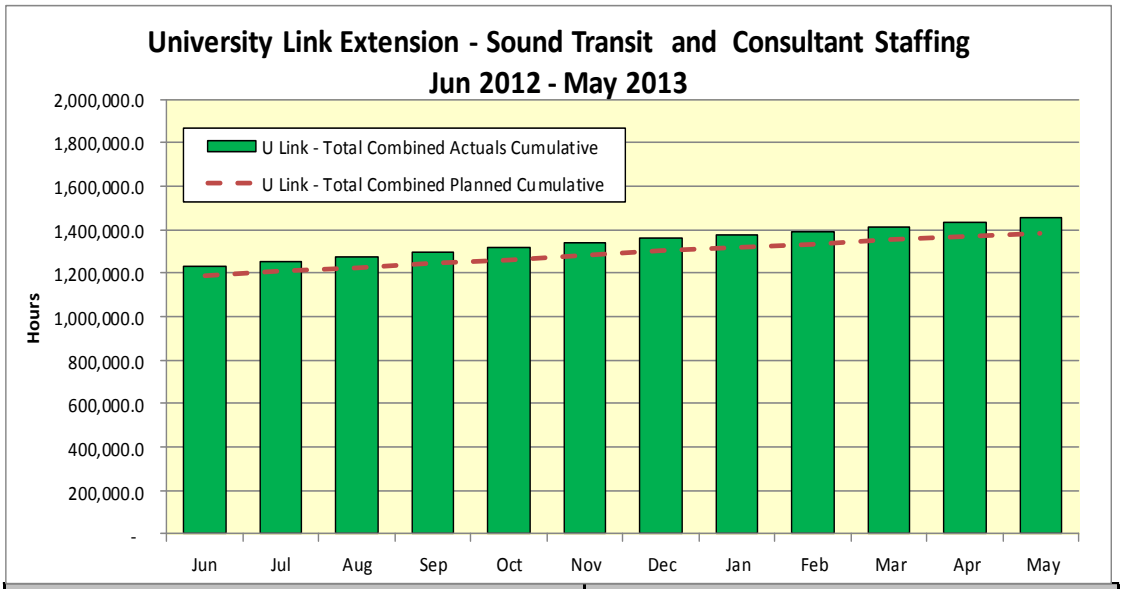
Project Staffing – Major Link Light Rail Programs

A total of 580.5 consultant and internal staff full time equivalents (FTE) participated in the planning, design and construction of on-going Link light rail extensions in May, an increase of 10% (45 FTE) from the April reporting period and 8% above planned staffing levels. Staffing for the University, Northgate, and East Link Extensions exceeded plan primarily due to utilization of a greater number of consultants than planned, while for the South 200th Link Extension internal staffing exceeded plan and consultant staffing was below plan. Staffing for the Lynnwood Link Extension was 26% (10.1 FTE) below plan; however, staffing for the Lynnwood Link Extension increased 14% (3.5 FET) from the April reporting period as the Draft Environmental Impact Statement is finalized. Staffing variance reporting by Link Extension follows.

University Link Extension Staffing

Total Internal and External Staffing – University Link Extension

During this reporting period, 127 consultant and internal staff was committed to the University Link Extension. Staffing for May was 23% (23.7 FTE) above plan, increasing 7% (8.6 FTE) from the April reporting period. Cumulatively, since August 2006, average monthly project staffing continues to trend approximately 5% (5 FTE/mo) above plan.

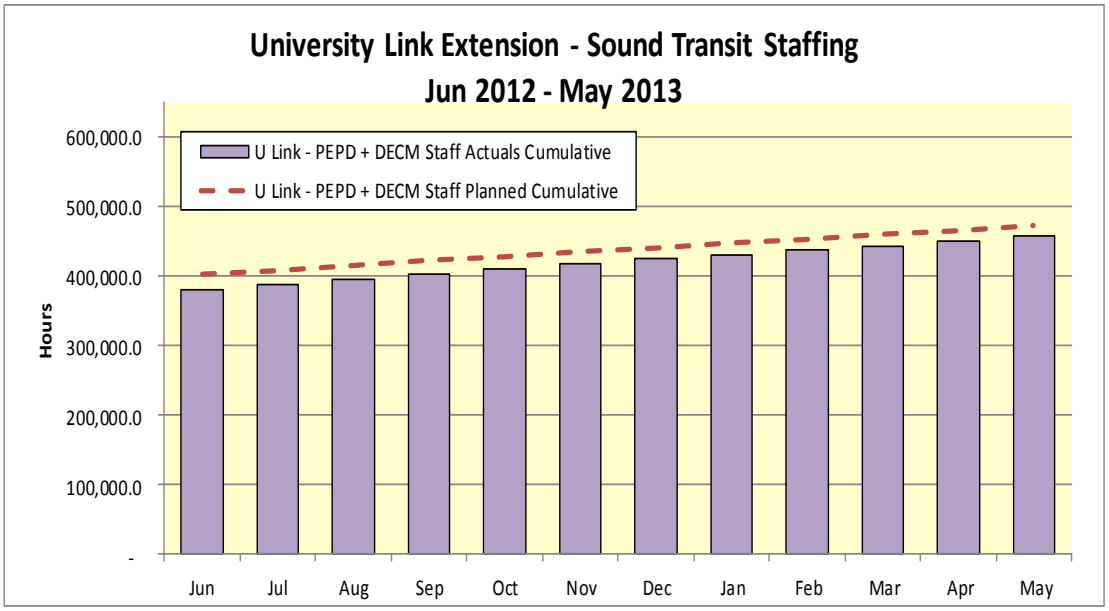


	Labor Hours to Date				Current Period May 2013			
	Total Planned	Total Actual	Total Variance	Percent Expended	Period Planned	Period Actual	Period Variance	Percent Expended
No. of Hours	1,384,403.8	1,455,107.1	70,703.3	105.1%	16,547.0	20,341.5	3,794.5	122.9%
Monthly Average	16,883.0	17,745.2	862.2					
Monthly FTE	105.5	110.9	5.4		103.4	127.1	23.7	

University Link Extension Staffing

Internal Resource Commitments to University Link Extension

Internal staffing in May decreased 5% (2 FTE) from the April reporting period to plan levels. Cumulatively since August 2006, average monthly internal staffing continues to trend 3.4% (1.2 FTE/mo.) below the baseline.



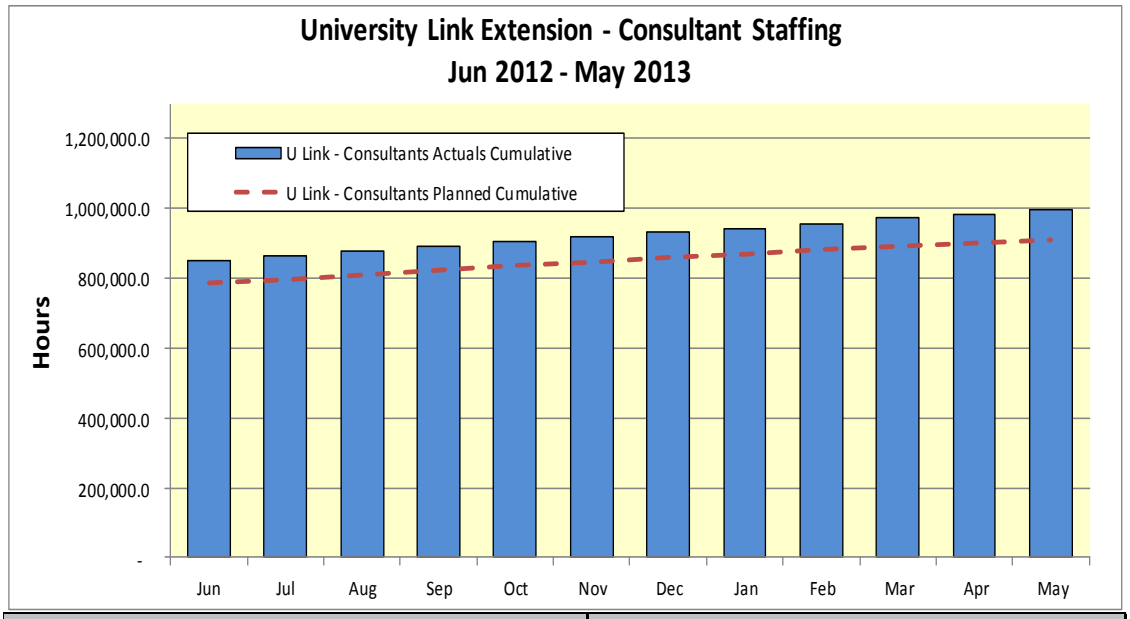
	Labor Hours to Date				Current Period May 2013			
	Total Planned	Total Actual	Total Variance	Percent Expended	Period Planned	Period Actual	Period Variance	Percent Expended
No. of Hours	472,719.8	456,698.9	-16,020.9	96.6%	6,240.0	6,210.3	-29.7	99.5%
Monthly Average	5,764.9	5,569.5	-195.4					
Monthly FTE	36.0	34.8	-1.2		39.0	38.8	-0.2	

University Link Extension Staffing

Consultant Resource Commitments to University Link Extension

During this reporting period, 88.3 consultant FTE were assigned to the University Link Extension an increase of 14% (10.6 FTE) from the April reporting period and continued trending ahead of plan by 37% (23.9 FTE). The increase from the April reporting period reflects mobilization of consultant resources required for systems installation.

Cumulatively, since August 2006, average monthly consultant staffing continues to trend approximately 10% (6 FTE/ mo.) above plan.



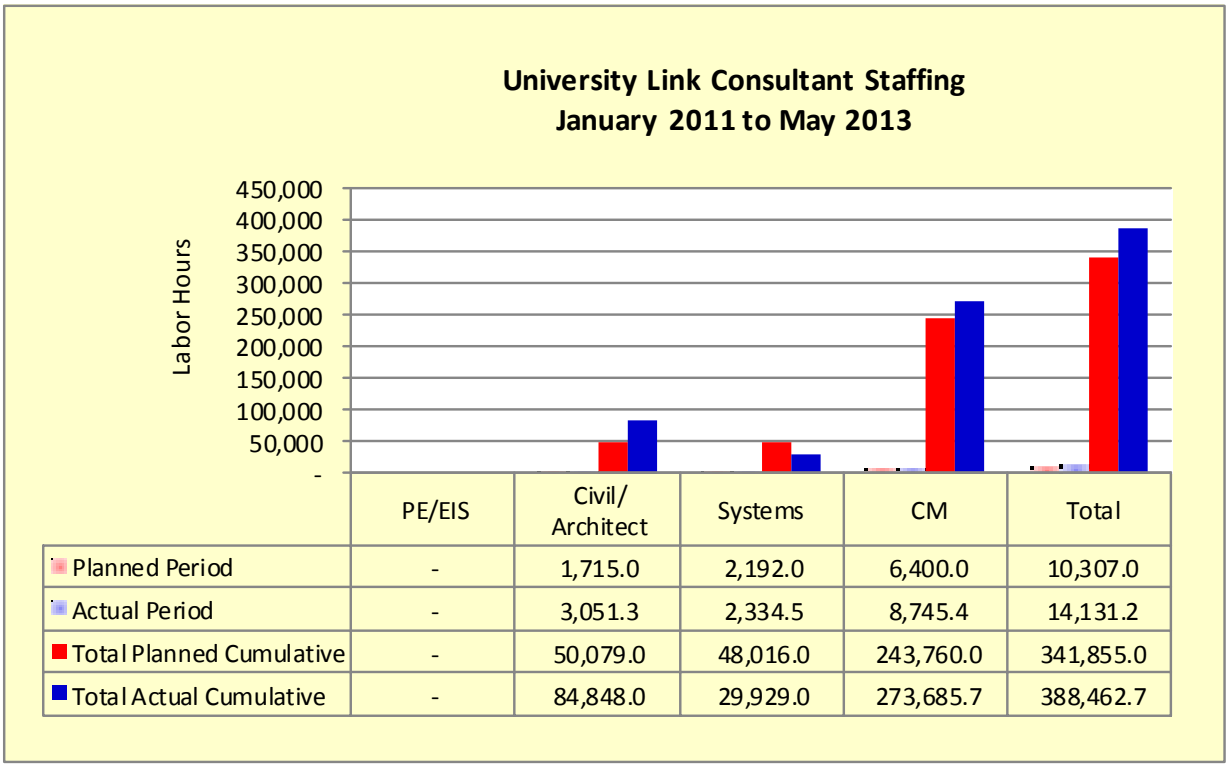
	Labor Hours to Date				Current Period May 2013			
	Total Planned	Total Actual	Total Variance	Percent Expended	Period Planned	Period Actual	Period Variance	Percent Expended
No. of Hours	911,684.0	998,408.3	86,724.3	109.5%	10,307.0	14,131.2	3,824.2	137.1%
Monthly Average	11,118.1	12,175.7	1,057.6					
Monthly FTE	69.5	76.1	6.6		64.4	88.3	23.9	

University Link Extension Staffing

Consultant Resource Commitments to University Link Extension, continued

Consultant utilization by discipline for the University Link Extension since January 2011 is illustrated below.

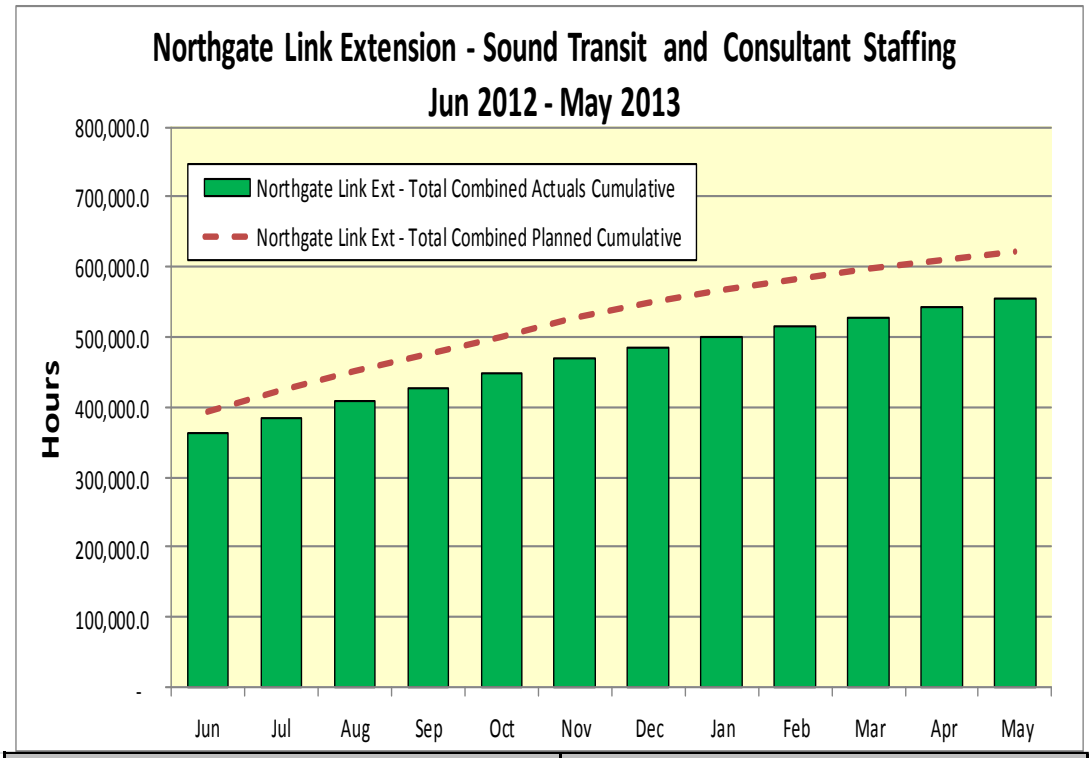
There were 17.2 consultant FTE providing civil engineering and architectural support to the University Link Extension in April, a decrease of 18% (3.7 FTE) from the previous reporting period and 6.5 FTE (40%) above planned staffing. Systems support during this reporting period increased by 95% (9.1 FTE) over the prior period as the systems contractor was preparing to advance work necessary for rail installation. Systems consultant exceeded plan by 37% (5.1 FTE) as required for field activities and review of initial submittals. Construction Management consultant staffing of 47.5 FTE decreased 23% from the previous period as consultant resources participating in the tunneling contracts is transitioned to other projects. Construction Management consulting staffing remained nearly 20% above plan. Staffing levels for con-



	PE/EIS	Civil/ Architect	Systems	CM	Total
Planned Period	-	1,715.0	2,192.0	6,400.0	10,307.0
Actual Period	-	3,051.3	2,334.5	8,745.4	14,131.2
Total Planned Cumulative	-	50,079.0	48,016.0	243,760.0	341,855.0
Total Actual Cumulative	-	84,848.0	29,929.0	273,685.7	388,462.7

Northgate Link Extension Staffing

During this reporting period, 85.3 internal and consultant staff was assigned to the Northgate Link Extension. This is an 8% (6.6 FTE) from the April reporting period and 9% (6.9 FTE) above the planned staffing of 78.4 FTE. Demolition and utility relocation continued at the Roosevelt Station while negotiations for acquiring the University of Washington properties where the University District station will be located continued. Consultants also supported the procurement of the tunneling contract (N125) assisting in responding to Requests for Information (RFIs) from prospective contractors and preparation of amendments to the tunneling contract package. The station finishes design contracts remain suspended until the procurement of the General Contractor /Construction Management (GC/CM) contractors for station construction are completed later this year. Cumulatively since January 2011 average monthly staffing continues to trend 11% (15.1 FTE) below plan.

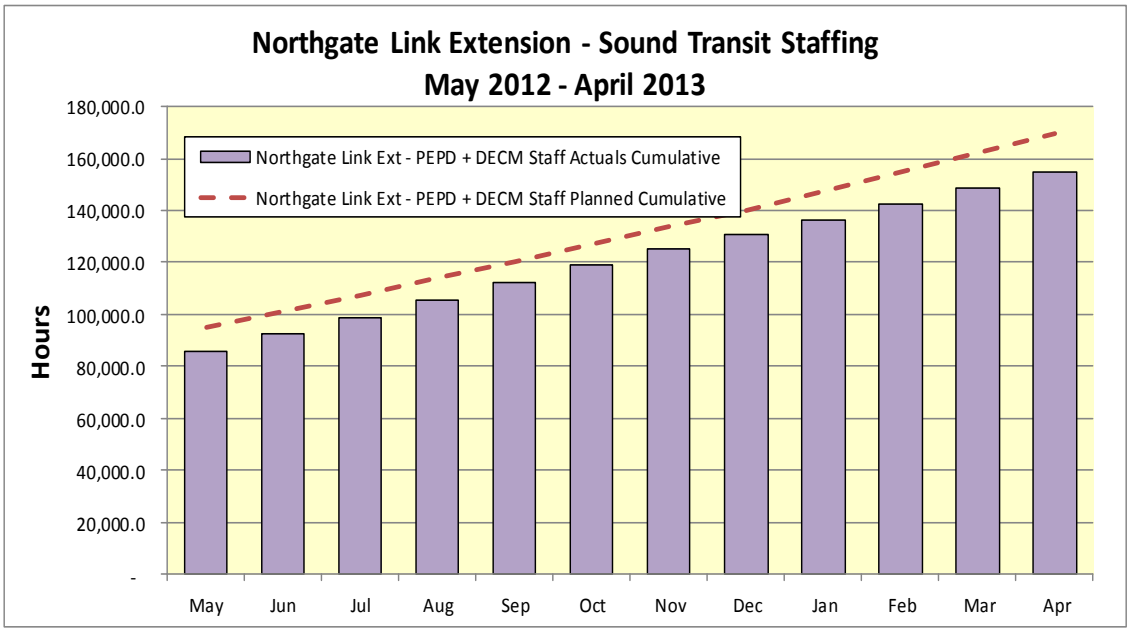


	Labor Hours Jan 2011 - May 2013				Current Period May 2013			
	Total Planned	Total Actual	Total Variance	Percent Expended	Period Planned	Period Actual	Period Variance	Percent Expended
No. of Hours	621,499.6	554,938.8	-66,560.7	89.3%	12,546.3	13,643.4	1,097.0	108.7%
Monthly Average	21,431.0	19,135.8	-2,295.2					
Monthly FTE	133.9	119.6	-14.3		78.4	85.3	6.9	

Northgate Link Extension Staffing

Internal Resource Commitments to Northgate Link Extension

As with the March and April reporting periods, internal staffing for May remained at 38 FTE and 16% (7.3 FTE) below plan in May. Cumulatively, since January 2011, average monthly internal staffing continues to trend below plan by 9% (3 FTE/mo.).

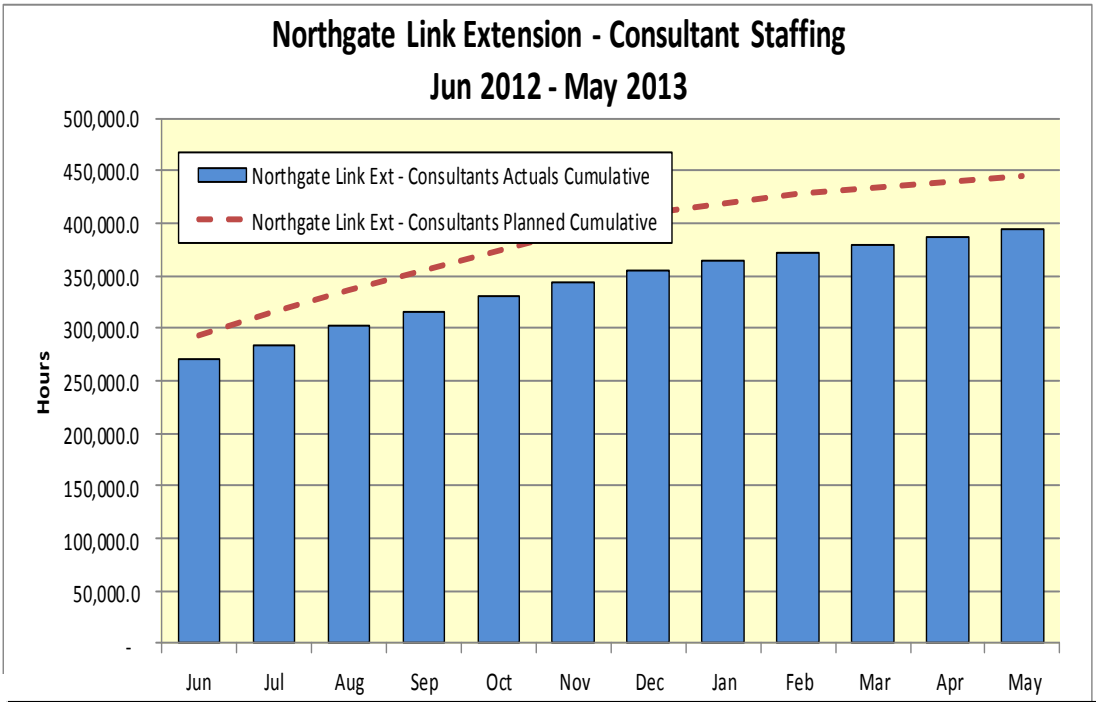


	Labor Hours Jan 2011 - May 2013				Current Period May 2013			
	Total Planned	Total Actual	Total Variance	Percent Expended	Period Planned	Period Actual	Period Variance	Percent Expended
No. of Hours	176,688.0	160,767.0	-15,921.0	91.0%	7,296.0	6,136.1	-1,160.0	84.1%
Monthly Average	6,092.7	5,543.7	-549.0					
Monthly FTE	38.1	34.6	-3.4		45.6	38.4	-7.2	

Northgate Link Extension Staffing

Consultant Resource Commitments to Northgate Link Extension

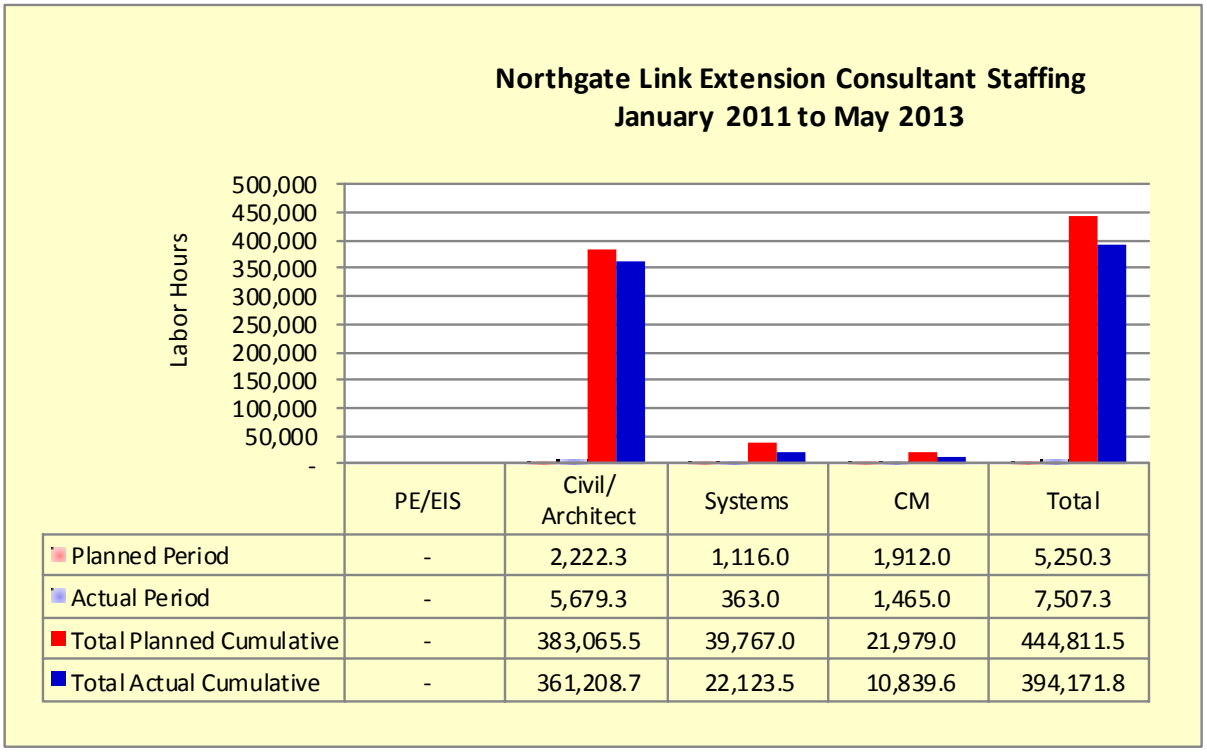
During May, 46.9 consultant FTE were assigned to the Northgate Link Extension, a 16% (6.4 FTE) increase from the April reporting period and 43% (14.1 FTE) above the plan as contract packaging for the Roosevelt Station Finishes General Contractor/Construction Manager contract pending advertisement and responding to requests for information and developing addenda for the tunneling procurement continued. Cumulatively, since January 2011, average consultant utilization continues to trend 12% (10.8 FTE/mo) below plan.



	Labor Hours Jan 2011 - May 2013				Current Period May 2013			
	Total Planned	Total Actual	Total Variance	Percent Expended	Period Planned	Period Actual	Period Variance	Percent Expended
No. of Hours	444,811.6	394,171.8	-50,639.8	88.6%	5,250.3	7,507.3	2,257.0	143.0%
Monthly Average	15,338.3	13,592.1	-1,746.2					
Monthly FTE	95.9	85.0	-10.9		32.8	46.9	14.1	

Northgate Link Extension Staffing

Consultant Resource Commitments to Northgate Link Extension



	PE/EIS	Civil/ Architect	Systems	CM	Total
Planned Period	-	2,222.3	1,116.0	1,912.0	5,250.3
Actual Period	-	5,679.3	363.0	1,465.0	7,507.3
Total Planned Cumulative	-	383,065.5	39,767.0	21,979.0	444,811.5
Total Actual Cumulative	-	361,208.7	22,123.5	10,839.6	394,171.8

Consultant utilization by discipline follows:

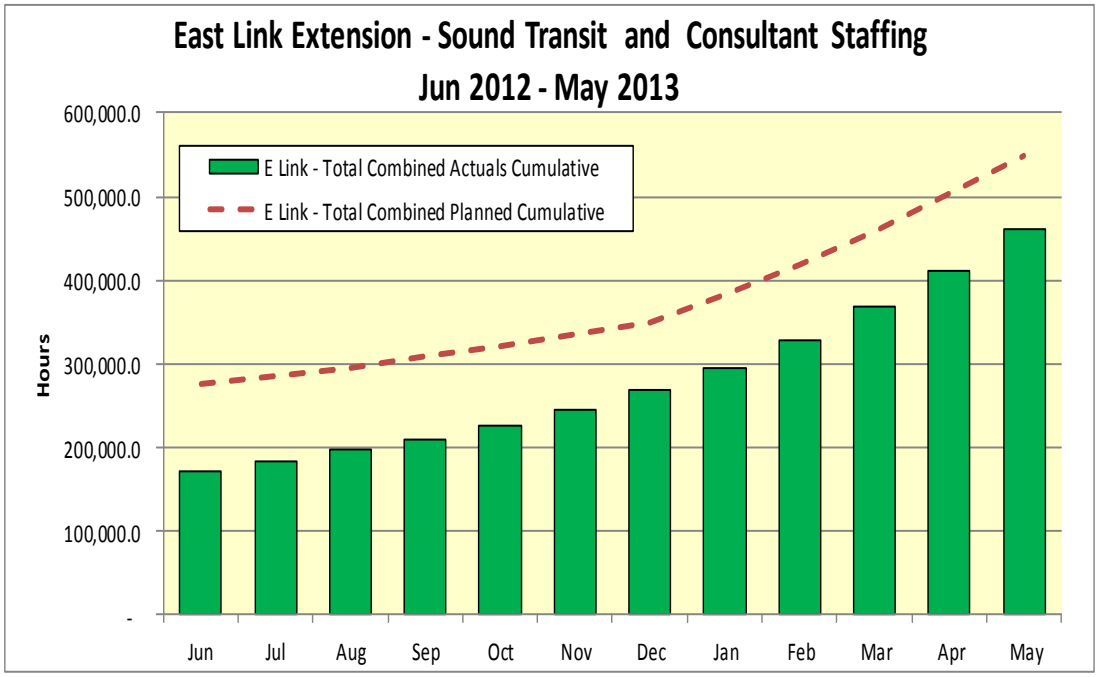
- Civil/architecture consultant utilization for May (35.5 FTE) increased 8% (2.5 FTE) from the April reporting period; civil/architecture consultant utilization for May is 150% (28.5 FTE) above plan. Civil engineering has been supporting the early work at the station locations, assisting in the tunneling and GC/CM procurements and completing design from the Maple Leaf Portal to Northgate, Northgate Station, and parking and other supporting facilities at the Northgate Mall.,

- Systems consultant utilization trended with the prior reporting period, remaining at 2 FTE in May and 67% (9.7 FTE) below the baseline staffing of 12.FTE as emphasis has been placed on completing civil packages and procuring the tunneling contractor. Cumulatively since January 2011, average monthly Systems consultant staffing continues to trend 44% (5 FTE/mo) below plan. Systems consultant staffing is projected to increase as the systems design is advanced.

- CM consultant staffing increased 80% (4.1 FTE) to 9.2 FTE in May and continues to remain below planned staffing of 12 FTE as negotiations to acquire the University of Washington property for the University District Station continue. As with the April reporting period, cumulatively, since January 2011, average monthly CM consultant staffing continues trend 2 FTE/mo. below plan.

East Link Extension Staffing

East Link Extension staffing continued to increase in May with 305.4 internal and consultant staff assigned to the project. This is 14% (38.6 FTE) above the April reporting period and 8.5% (23.9 FTE) above the baseline.



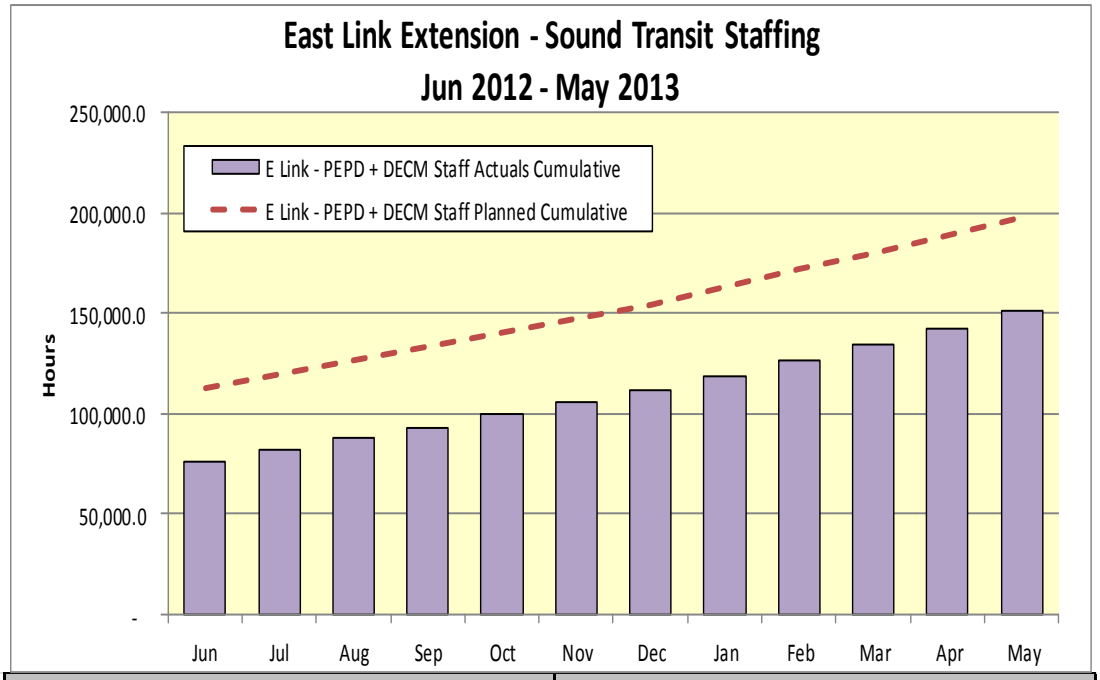
	Labor Hours Jan 2011 - May 2013				Current Period May 2013			
	Total Planned	Total Actual	Total Variance	Percent Expended	Period Planned	Period Actual	Period Variance	Percent Expended
No. of Hours	548,742.4	460,483.9	-88,258.5	83.9%	45,032.0	48,859.1	3,827.1	108.5%
Monthly Average	18,922.2	15,878.8	-3,043.4					
Monthly FTE	118.3	99.2	-19.0		281.5	305.4	23.9	

Cumulatively since January 2011, average staffing is trending 16% (19 FTE/mo.) below plan.

East Link Extension Staffing

Internal Resource Commitments to East Link Extension

During May internal staffing for the East Link Extension (56.4 FTE) was 7% (4 FTE) above the April reporting period and continued to trend within 5% (2.8 FTE) of plan. Cumulatively, since January 2011, average monthly internal staffing continues to trend nearly 25% (9.9 FTE/mo) below plan.

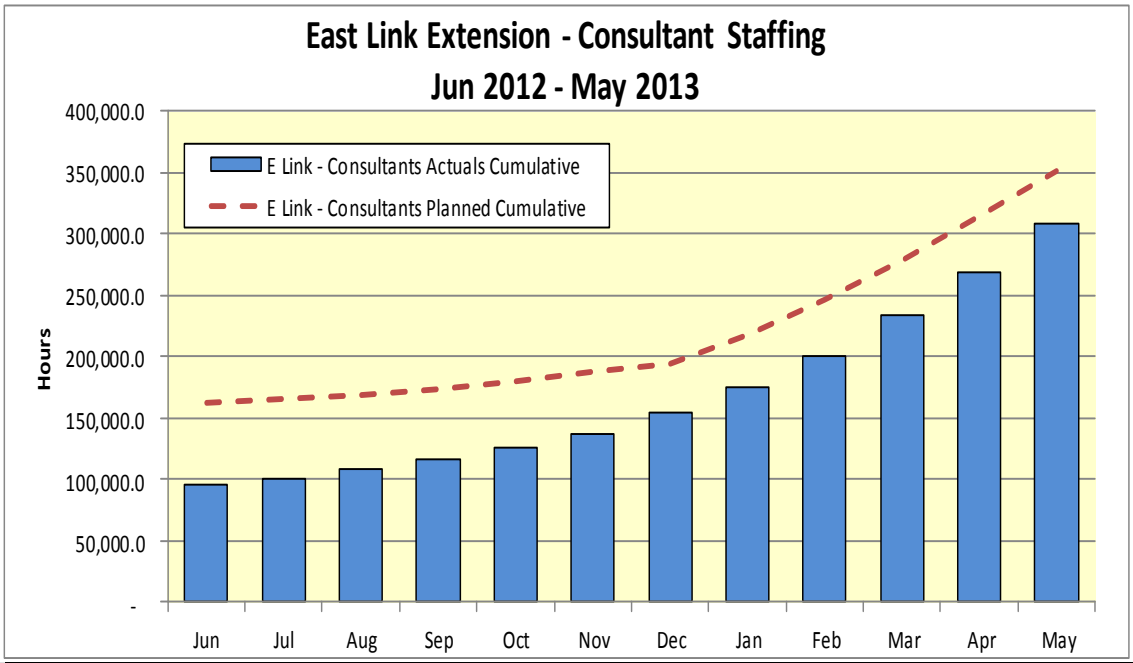


	Labor Hours Jan 2011 - May 2013				Current Period May 2013			
	Total Planned	Total Actual	Total Variance	Percent Expended	Period Planned	Period Actual	Period Variance	Percent Expended
No. of Hours	197,536.0	151,560.5	-45,975.5	76.7%	8,576.0	9,017.3	441.3	105.1%
Monthly Average	6,811.6	5,226.2	-1,585.4					
Monthly FTE	42.6	32.7	-9.9		53.6	56.4	2.8	

East Link Extension Staffing

Consultant Resource Commitments to East Link Extension

During May, 249 consultant FTE were assigned to the East Link Extension, 34.7 FTE (16%) above staffing for the April reporting period and 21.2 FTE (12%) above the staffing baseline. Cumulatively since January 2011, average monthly consultant staffing is trending 22% (9.1 FTE/mo.) below plan.

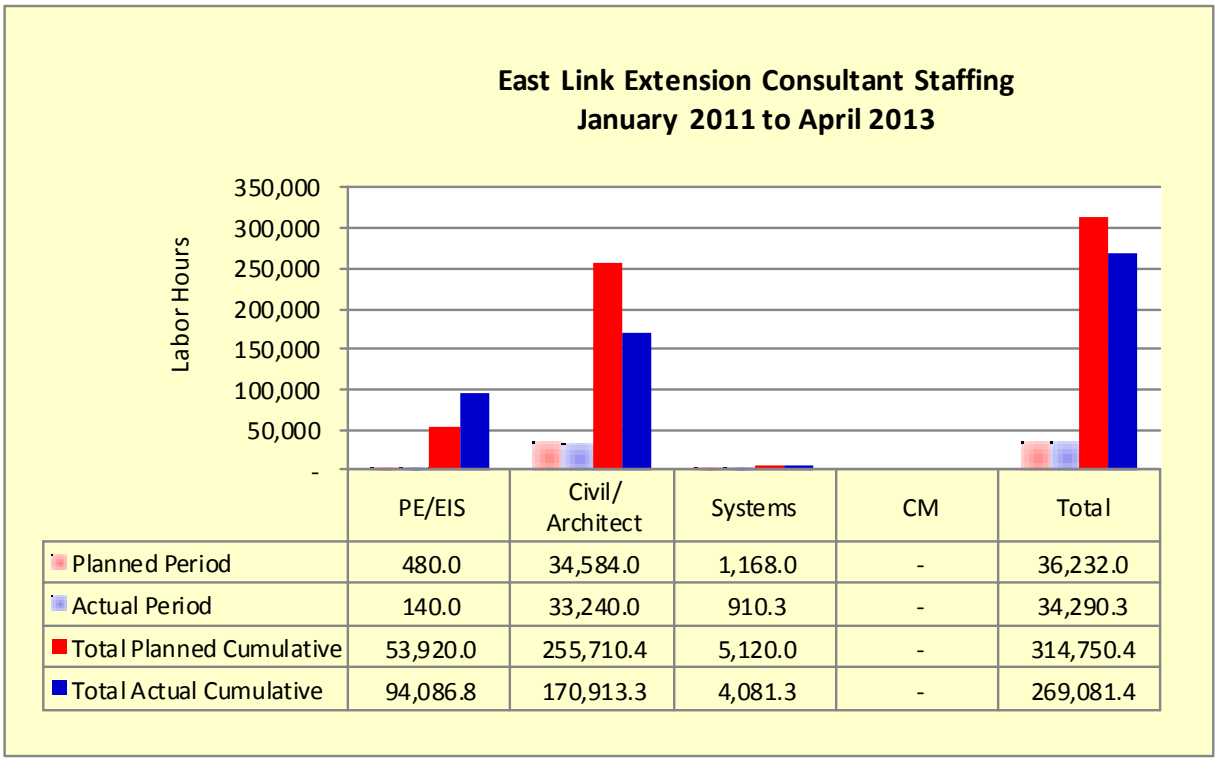


	Labor Hours Jan 2011 - May 2013				Current Period May 2013			
	Total Planned	Total Actual	Total Variance	Percent Expended	Period Planned	Period Actual	Period Variance	Percent Expended
No. of Hours	351,206.4	308,923.5	-42,283.0	88.0%	36,456.0	39,841.8	3,385.8	109.3%
Monthly Average	12,110.6	10,652.5	-1,458.0					
Monthly FTE	75.7	66.6	-9.1		227.9	249.0	21.2	

East Link Staffing

Consultant Resource Commitments to East Link, continued

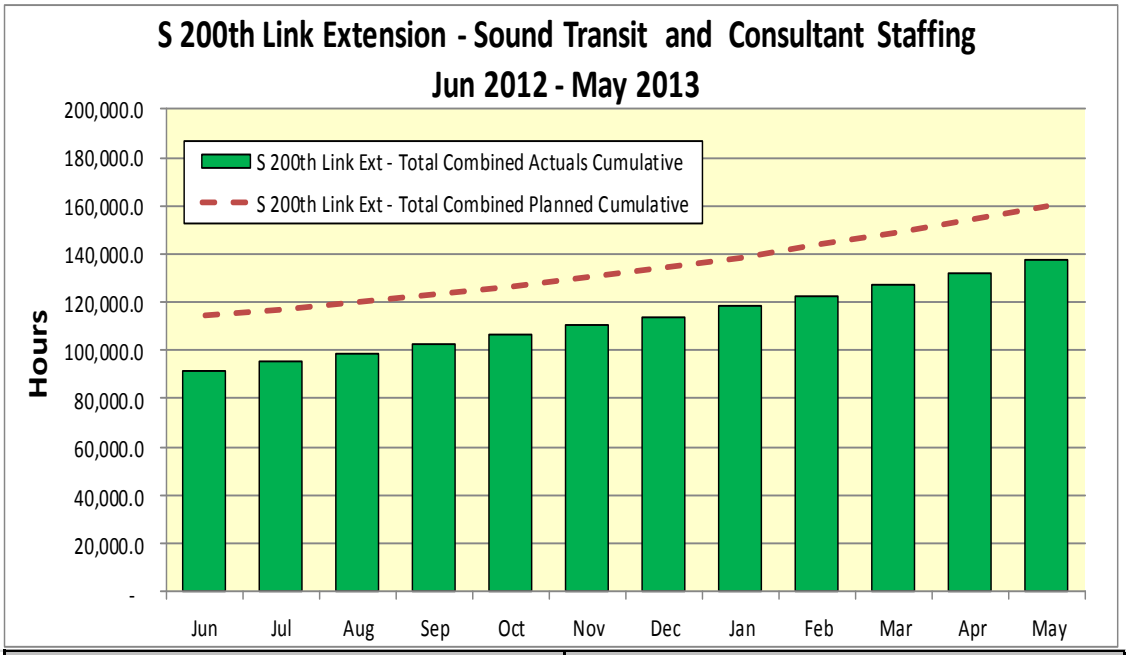
Consultant utilization by discipline since January 2011 is reflected below. Similar to the April reporting period civil engineering consultant staffing in represents the majority (over 87% or 216.2 FTE) of consultant staffing.



	PE/EIS	Civil/ Architect	Systems	CM	Total
Planned Period	480.0	34,584.0	1,168.0	-	36,232.0
Actual Period	140.0	33,240.0	910.3	-	34,290.3
Total Planned Cumulative	53,920.0	255,710.4	5,120.0	-	314,750.4
Total Actual Cumulative	94,086.8	170,913.3	4,081.3	-	269,081.4

S. 200th Link Extension Staffing

During this reporting period, the 34.2 internal and consultant staff was an increase of 8% (2.6 FTE) over the prior reporting period and 6.9 FTE (9%) above plan. The increase in consultant for design and other submittal reviews following contractor mobilization and start of civil construction.



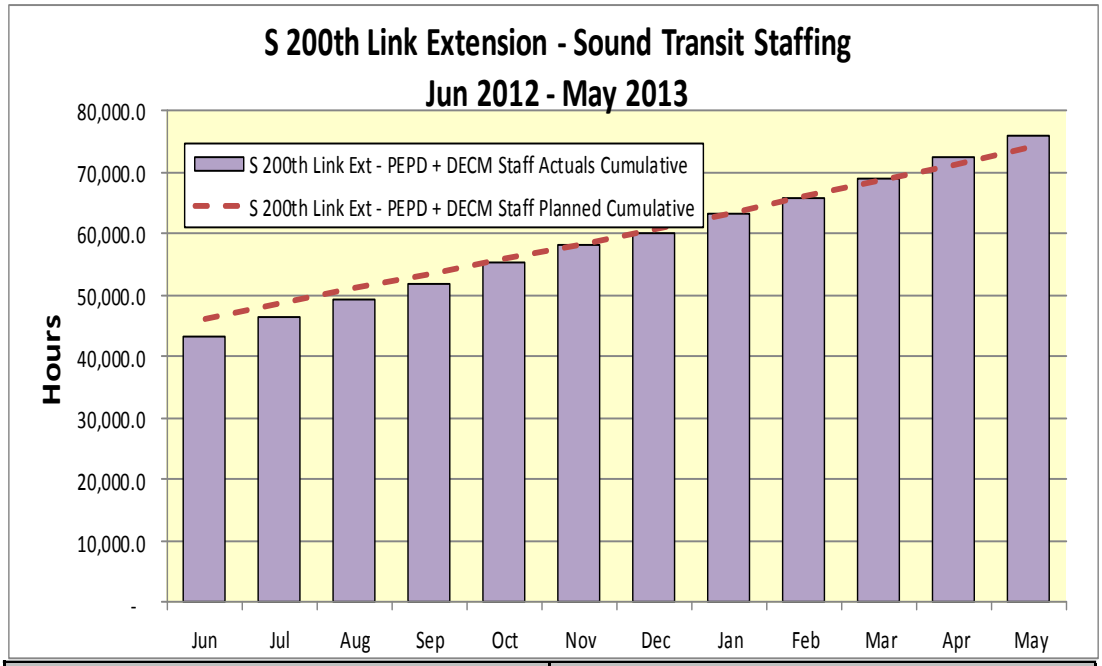
	Labor Hours Jan 2011 - May 2013				Current Period May 2013			
	Total Planned	Total Actual	Total Variance	Percent Expended	Period Planned	Period Actual	Period Variance	Percent Expended
No. of Hours	159,961.2	137,638.3	-22,322.9	86.0%	5,776.0	5,466.8	-309.2	94.6%
Monthly Average	5,515.9	4,746.1	-769.8					
Monthly FTE	34.5	29.7	-4.8		36.1	34.2	-1.9	

Since January 2011, average internal and consultant staffing is trending 14% (5 FTE/mo.) below plan.

S. 200th Link Extension Staffing

Internal Resource Commitments South Link to S.200th Link Extension

Similar to the April reporting period, internal staffing remained at 21 FTE which is 27% (4.5 FTE) below plan. Activity continues on contract packaging for the station parking structure, surface parking and traffic impact mitigation measures. Sound Transit intends to complete a structured parking facility in the vicinity of the station through a design/build delivery strategy and is seeking approval from the Washington State Department of Enterprise Service Capital Projects Advisory Review Board (CPARB) to proceed with this strategy. Traffic impact mitigation and surface parking will be completed through a traditional design-bid-build process.



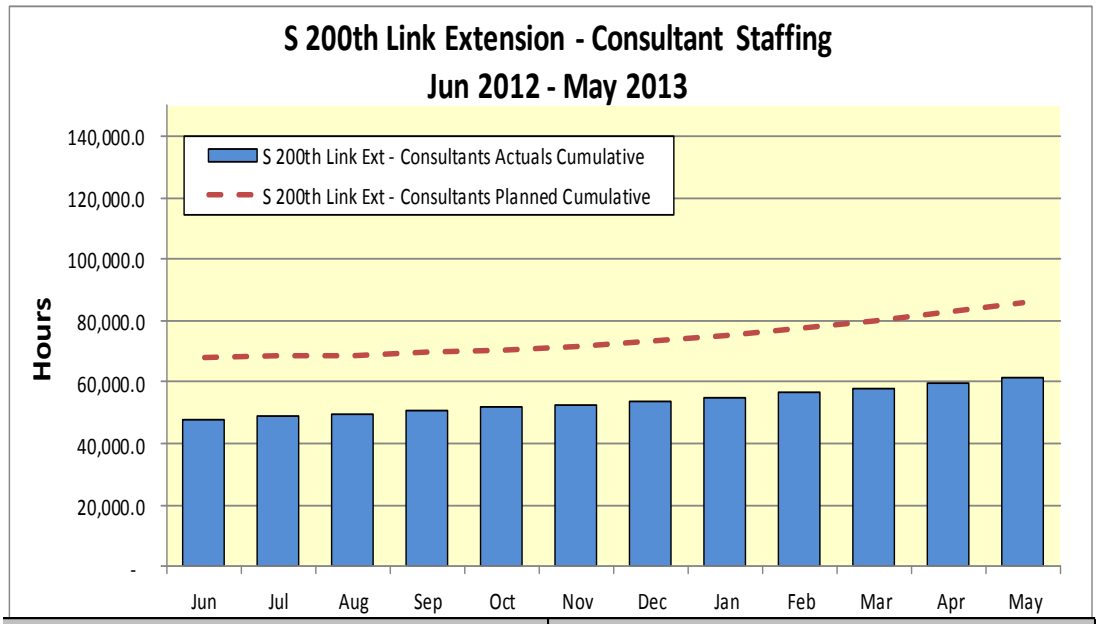
	Labor Hours Jan 2011 - May 2013				Current Period May 2013			
	Total Planned	Total Actual	Total Variance	Percent Expended	Period Planned	Period Actual	Period Variance	Percent Expended
No. of Hours	73,939.2	75,922.0	1,982.8	102.7%	2,656.0	3,371.8	715.8	127.0%
Monthly Average	2,549.6	2,618.0	68.4					
Monthly FTE	15.9	16.4	0.4		16.6	21.1	4.5	

Cumulatively, since January 2011, average internal staffing has trended consistently with the baseline.

S. 200th Link Extension Staffing

Consultant Resource Commitments to S. 200th Link Extension

Consultant staffing on the S. 200th Link Extension (13.1 FTE) increased 36% (3.5 FTE) from the April reporting period but remains below plan by 33% (6.4 FTE). Consultant staffing continued for preliminary engineering and contract packaging for the parking structure and the roadway improvements in the vicinity of the S. 200th Station and management oversight of the design/build activities. Cumulatively, since January 2011, average consultant staffing is trending 28% (5.2 FTE) below.

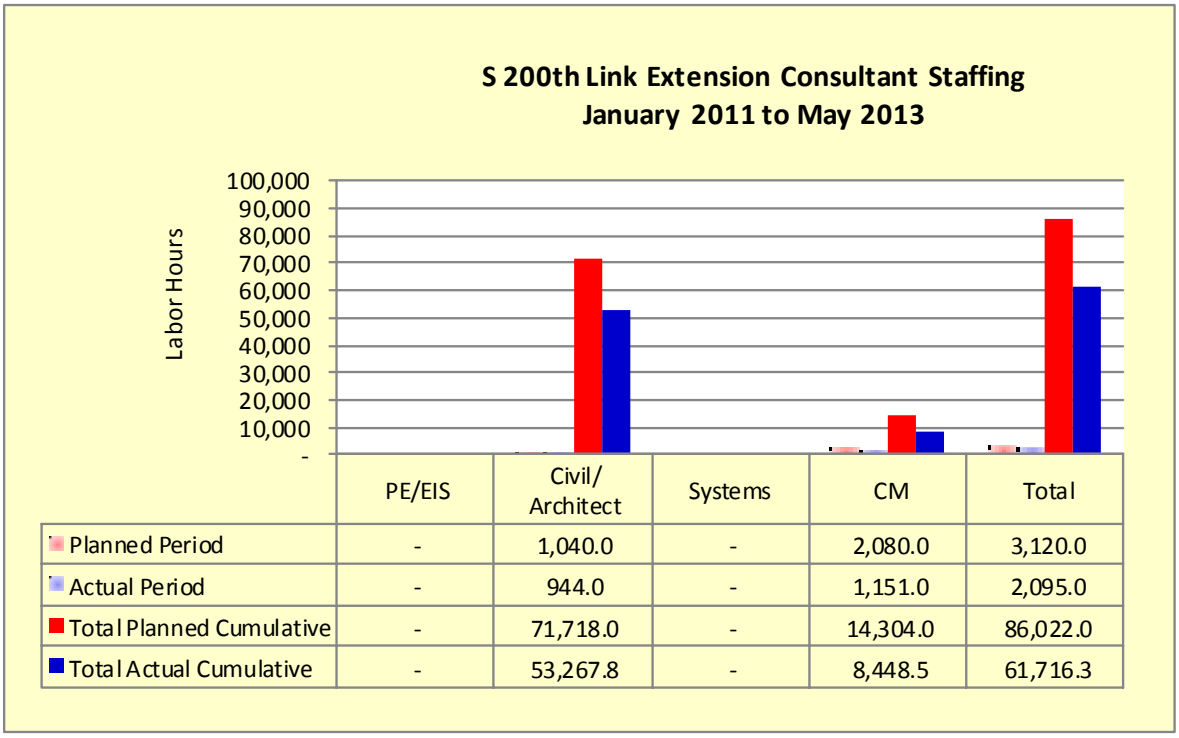


	Labor Hours Jan 2011 - May 2013				Current Period May 2013			
	Total Planned	Total Actual	Total Variance	Percent Expended	Period Planned	Period Actual	Period Variance	Percent Expended
No. of Hours	86,022.0	61,716.3	-24,305.7	71.7%	3,120.0	2,095.0	-1,025.0	67.1%
Monthly Average	2,966.3	2,128.1	-838.1					
Monthly FTE	18.5	13.3	-5.2		19.5	13.1	-6.4	

S. 200th Link Extension Staffing

Consultant Resource Commitments to S. 200th Link Extension

Design/build project management consultants (7.2 FTE) continued to make up the majority (55%) of the consultant staffing for this reporting period. Additional consultant staff (6.5 FTE) were engaged in design efforts for the parking structure, surface parking and traffic mitigation measures, and submittals reviews. There was no Systems consultant level of effort during this reporting period; systems' consulting has been incorporated into the station and guideway design/build contract and will not be tracked or reported separately from design/build consultant staffing.



	PE/EIS	Civil/ Architect	Systems	CM	Total
Planned Period	-	1,040.0	-	2,080.0	3,120.0
Actual Period	-	944.0	-	1,151.0	2,095.0
Total Planned Cumulative	-	71,718.0	-	14,304.0	86,022.0
Total Actual Cumulative	-	53,267.8	-	8,448.5	61,716.3

Lynnwood Link Staffing

During May staffing (28.6 FTE) remained below plan (26% or 10.1 FTE) but increased 17% (2.5 FTE) over the April reporting period. Internal staffing of 11.3 FTE was approximately 11% (1.4 FTE) below plan. Consultant staffing of 17.3 FTE was 67% of plan; all consultant staffing were engaged in preliminary engineering. Cumulatively staffing for the Lynnwood Link is trending 11 FTE/mo (28%) below plan.

	Labor Hours Jan 2013 - May 2013				Current Period May 2013			
	Total Planned	Total Actual	Total Variance	Percent Expended	Period Planned	Period Actual	Period Variance	Percent Expended
No. of Hours	30,960.0	22,351.8	-8,608.2	72.2%	6,192.0	4,574.0	-1,618.0	73.9%
Monthly Average	6,192.0	4,470.4	-1,721.6					
Monthly FTE	38.7	27.9	-10.8		38.7	28.6	-10.1	

ACRONYMS

AA	Alternative Analysis
APE	Area of Potential Impact
BCE	Baseline Cost Estimate
BCWS	Budgeted Cost of Work
BIM	Building Information Modeling
BNSF	Burlington Northern Santa Fe Railway
CCB	Change Control Board
CDF	Controlled Density Fill
CHS	Capitol Hill Station
CM	Construction Management
CMU	Concrete Masonry Unit
CO	Change Order
CPI	Cost Performance Index
CPM	Critical Path Method
DAHP	Department of Archaeology & History Preservation
DART	Days Away, Restricted or Modified
D/B	Design Build
DECM	Design, Engineering and Construction Management
DEIS	Draft Environmental Impact Statement
DPD	Seattle Department of Planning and Development
DSC	Differing Site Conditions
DSDC	Design Support During Construction
DSTT	Downtown Seattle Transit Tunnel
EFC	Estimated Final Cost
EMI	Electro Magnetic Interference
FD	Final Design
FHWA	Federal Highway Administration
FSEIS	Final Supplemental Environmental Impact Statement
FFGA	Full Funding Grant Agreement
FTA	Federal Transit Administration
FTE	Full Time Employee
GC/CM	General Contractor /Construction Management
IRT	Independent Review Team
IWP	Industrial Waste Permit
JARPA	Joint Aquatic Resource Permit Application
JCM	JCM U-Link Joint Venture (Contract U230)
KCM	King County Metro
LNTP	Limited Notice to Proceed

ACRONYMS, continued

LRT	Light Rail Transit
LRV	Light Rail Vehicle
LTK	LTK Engineering Services
MACC	Maximum Allowable Construction Cost
MDA	Major Discharge Authorization
MLK	Martin Luther King, Jr. Way
MOA	Memorandum of Agreement
MOS	Minimum Operable Segment
MOU	Memorandum of Understanding
MPPCV	Major Public Project Construction Variance
MRB	Material Review Board
MTP	Montlake Triangle Project
MUP	Master Use Permit
NB	Northbound
NCTP	North Corridor Transit Partners
NEPA	National Environmental Policy Act
NOAA	National Oceanic and Atmospheric Administration
NTP	Northlink Transit Partners
OCS	Overhead Catenary System
OMF	Operations and Maintenance Facility
OMSF	Operations and Maintenance Satellite Facility
PB	PB Americas Inc.
PE	Preliminary Engineering
PEP	Project Execution Plan
PEPD	Planning, Environment and Project Development
PMOC	Project Management Oversight Consultant
PSST	Pine Street Stub Tunnel
QA	Quality Assurance
QC	Quality Control
QTR	Quarter
RE	Resident Engineer
RFC	Request for Change
RFI	Request for Information
RFP	Request for Proposal
RFQ	Request for Qualifications
RIR	Recordable Injury Rates
ROD	Record of Decision
ROW	Right of Way

ACRONYMS, continued

SB	Southbound
SCADA	Supervisory Central and Data Acquisition
SCC	Standard Cost Categories
SCL	Seattle City Light
SDEIS	Supplemental Draft Environmental Impact Statement
SEPA	State Environmental Policy Act
SIP	Street Improvement Permitting
SPI	Schedule Performance Index
SR	State Route
ST	Sound Transit
START	Seattle Tunnel and Rail Team
SWI	Stacy & Witbeck, Inc.
TBM	Tunnel Boring Machine
TE	Traction Electrification
TFK	Traylor Frontier Kemper Joint Venture
TOD	Transit Oriented Development
TVM	Ticket Vending Machine
UAC	Unallocated Contingency
U-Link	University Link project
USFWS	U.S. Fish and Wildlife Service
UW	University Of Washington
UWS	University of Washington Station
VE	Value Engineering
VECP	Value Engineering Cost Proposal
WBS	Work Breakdown Structure
WSDOT	Washington Department of Transportation